



SY-298H24

HDMI to HDMI Up & Down Scaler Including 24fps input support

OPERATION MANUAL



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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, 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 any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE	SUMMARY OF CHANGE
VS1	09/11/2011	First release
v1.01	14/12/12	Added Dolby Digital New Feature



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1. INTRODUCTION

The SY-298H24 will allow a HDMI source signal to be up or down scaled according to the screen specifications required. Any HDMI signal inputted can be scaled up or down to between 480i to 1080p, plus PC output resolutions of VGA or UXGA. This device accepts 1080p24 input resolutions enabling content filmed at 24 frames per second displayed. This feature is particularly useful when a 1080p24 source signal is distributed to multiple displays. If any screen is not 1080p24 compatible, the SY-298H24 can be used to scale the input signal to suit the supported screen resolution, whilst not affecting the signal being sent to the 1080p24 compatible screens. This solution is perfect for home cinema enthusiasts who require full native Blu-ray resolutions in their home cinema system, whilst providing signal flexibility to other screens around the home.

2. APPLICATIONS

- PC Resolutions converted into HD Resolutions
- **III** HD Resolutions converted into PC Resolutions

3. PACKAGE CONTENTS

- **III** HDMI to HDMI Scaler Box
- **III** 5V /1A DC Power Adaptor
- **III** Operation Manual

4. SYSTEM REQUIREMENTS

Input source equipment such as PC/laptop or Blu-ray player and output to HDTV or HD monitor with HDMI connection cables.



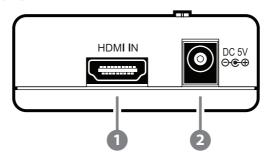
5. FEATURES

- **III** HDMI, HDCP1.1 and DVI compliant
- Upscale video signal from HDMI source between 480i and 1080p@50/60, including 1080p24
- Supports a wide range of output resolutions from 480i to 1080p and PC from VGA to SXGA
- Supports audio sampling rate up to 192kHz
- Supports Dolby & DTS 5.1 audio pass-through.
- Motion adaptive 3-D deinterlacing algorithm
- 3-D noise reduction in both temporal and spatial domain
- **III** Supports Frame rate conversion
- Adaptive contrast enhancement
- Support CEC bypass
- **III** OSD (On Screen Display) Menu for ease of use



6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1 HDMI In

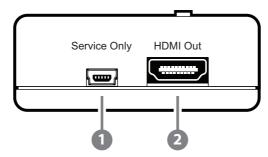
This slot is where you plug in your input source device such as PC/laptop or Blu-ray player with an HDMI cable.

2 DC 5V

This slot is where you plug the 5V DC power supply included in the package into the unit and connect the adaptor to an AC outlet.



6.2 Rear Panel

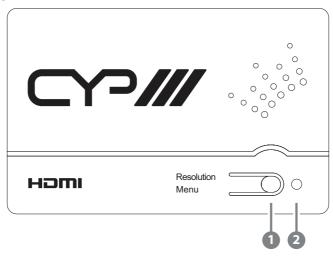


- 1 USB
 - This slot is specifically made for factory usage. It does not support any signal transmission or power supply.
- HDMI Out

This slot is to connect to an HDTV/display with a HDMI cable for displaying your sources content.



6.3 Top Panel



1 Timing button

Press this button once to show the output displays resolution and while OSD is still on press it again to select the output resolution from $480p \sim 1920 \times 1200RB$ or Native.



Power LED

This LED will illuminate when the device is connected with power supply.



7. CONNECTION AND INSTALLATION





8. SPECIFICATIONS

Maximum Pixel Rate 165MHz

Input Ports 1 x HDMI, 1 x USB (for service only)

Output Ports 1 x HDMI

Input / Output

VGA~UXGA, 480i~1080p

Resolution

Audio Sampling Rate32~192kHzHDMI Cable In1080p 8-bit/ MHDMI Cable Out1080p 8-bit/ M

ESD Protection Human body model: $\pm 8 \text{ kV}$ (Air-gap discharge)

±4 kV (Contact discharge)

Power Supply 5V/1A linear power adaptor

(US/EU standards, CE/FCC/UL certified)
Or 5V/ 1.2A switching power adaptor
(with universal plug, CE/FCC/UL certified)

Dimensions 114 mm (W) \times 65 mm (D) \times 26 mm (H)

Weight 120 g
Chassis Material Plastic
Silkscreen Colour White

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 (non-condensing)

Power Consumption 4.7 W

^{*} Cable tested with 24AWG cable, using cables of another type may result in a different operating distance.

^{*} Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.



9. ACRONYMS

ACRONYM	COMPLETE TERM
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface
USB	Universal Serial Bus
VGA	Video Graphics Array
WUXGA	Wide Ultra Extended Graphics Array



CYP (UK) Ltd., Unit 7, Shepperton Business Park, Govett Avenue, Shepperton, Middlesex, TW17 8BA

Tel: +44 (0) 20 3137 9180 | Fax: +44 (0) 20 3137 6279

Email: sales@cypeurope.com www.cypeurope.com V1.01