CPT-385AMN
VGA to CV/SV Scaler

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.
- Please completely disconnect the power when the unit is not in use to avoid wasting electricity.

REVISION HISTORY

VERSION NO.	DATE	SUMMARY OF CHANGE
VR1	07/02/13	Preliminary release
VS2	27/07/18	Final technical review

CONTENTS

1. INTRODUCTION

This VGA to CV/SV scaler is designed to convert and scale a variety of analog computer resolutions, from VGA to WUXGA (RB), into interlaced NTSC or PAL video. With frame rate conversion and Overscan/Underscan features that allow users to view a PC source on a Composite or S-Video monitor without the image extending beyond the edge of the screen and being cut off.

2. APPLICATIONS

- Video conference
- Business presentation
- Lecture or class room

3. PACKAGE CONTENTS

- 1×VGA to CV/SV Scaler
- 1×5V/2.6A DC Power Adapter
- 1×Operation Manual

4. SYSTEM REQUIREMENTS

- VGA source equipment such as a PC or laptop.
- Composite or S-Video receiving equipment such as a TV, VCR or broadcast monitor.

5. FEATURES

- Automatically detects and down converts the incoming VGA signal to NTSC or PAL
- Supports high resolution PC input timings from VGA to WUXGA (RB)
- Scaled video is output simultaneously as Composite and S-Video signals
- Output format is switchable between NTSC/PAL
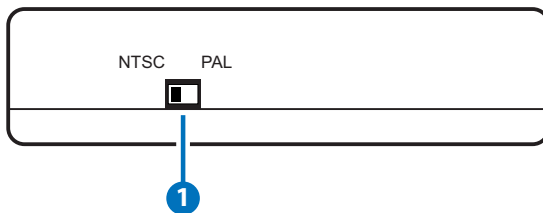- Manual Overscan/Underscan selection

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Top Panel
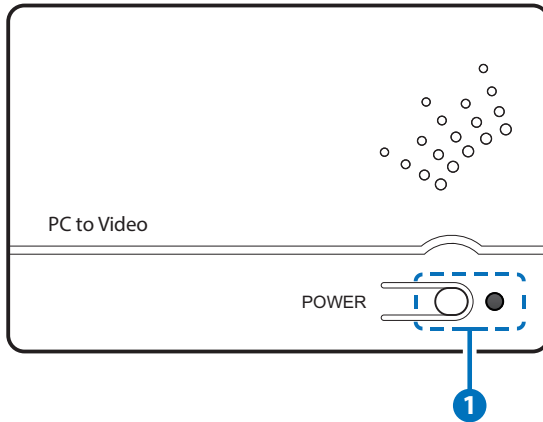
1 **POWER BUTTON & LED:** Press this button to power the unit on (green LED) or place it into stand-by mode (red LED).

6.2 Front Panel

1 **NTSC/PAL SWITCH:** Move this switch to select between outputting in the NTSC or PAL video format. Following a format change, the unit will attempt to automatically adjust the output image (size, phase and position). While the auto-adjustment is being performed, the power LED will blink.
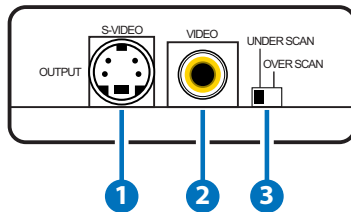
Note: The source video must have a bright, edge-to-edge, image in order to allow the auto adjustment function to complete successfully.

6.3 Left Panel
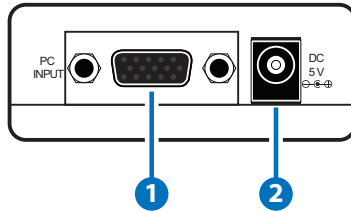
1 **PC INPUT PORT:** Connect to VGA source equipment such as a PC or laptop.

2 **DC 5V PORT:** Plug the 5V DC power adapter into this port and connect it to an AC wall outlet for power.

6.4 Right Panel

1 **S-VIDEO OUTPUT PORT:** Connect to S-Video display equipment such as a TV, VCR or studio monitor for analog video output.

2 **VIDEO OUTPUT PORT:** Connect to Composite Video display equipment such as a TV, VCR or studio monitor for analog video output.

3 **UNDERSCAN/OVERSCAN SWITCH:** Move this switch to select between the underscan and overscan output modes.

7. CONNECTION DIAGRAM

PC/Laptop

VGA Input

Power Supply

SV Output OR CV Output

Analog TV
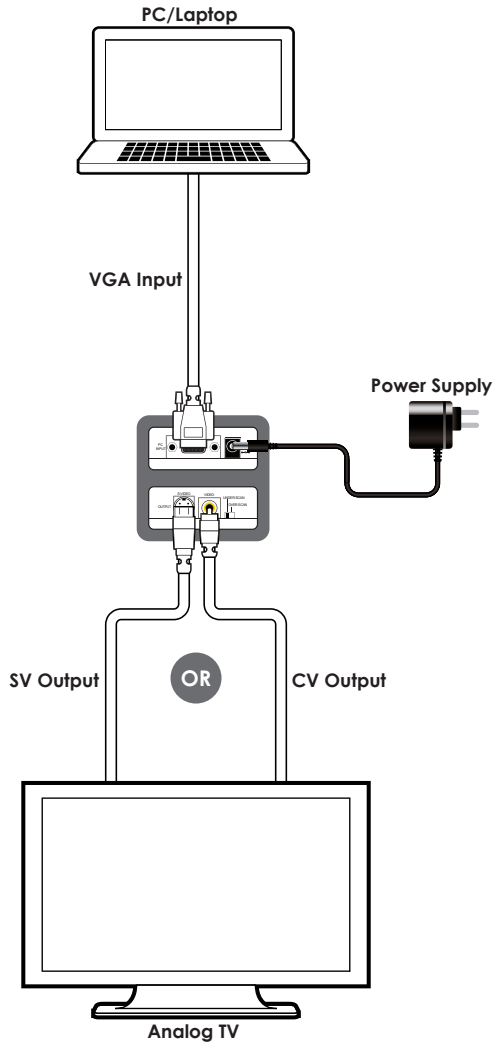
8. SPECIFICATIONS

8.1 Technical Specifications

Input Port	1×VGA (HD-15)
Output Ports	1×S-Video (4-pin mini-DIN)
	1×Composite Video (RCA)
Power Supply	5V/2.6A DC
	(US/EU standards, CE/FCC/UL certified)
ESD Protection	Human Body Model:
	±8kV (Air Discharge)
	±4kV (Contact Discharge)
Dimensions	100mm×18.5mm×64mm (W×H×D)
	[Case Only]
	113mm×26mm×64mm (W×H×D)
	[All Inclusive]
Weight	90g
Chassis Material	Plastic
Silkscreen Color	Gray
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	5W

8.2 Video Specifications

Supported Resolutions (Hz)		Input	Output
640×480	60, 72, 75, 85	✓	×
720×400	70	✓	×
720×576	50	✓	×
800×600	56, 60, 72, 75, 85	✓	×

Supported Resolutions (Hz)		Input	Output
1024×768	60, 70, 75, 85	✓	✗
1152×864	70, 75, 85	✓	✗
1280×720	25, 30, 50, 60	✓	✗
1280×768	60RB, 60	✓	✗
1280×800	60RB, 60, 75	✓	✗
1280×960	60, 85	✓	✗
1280×1024	60, 75, 85	✓	✗
1366×768	60RB, 60	✓	✗
1440×900	60RB, 60, 75	✓	✗
1600×1200	60	✓	✗
1680×1050	60RB, 60	✓	✗
1920×1080	24, 25, 30, 50, 60	✓	✗
1920×1200	60RB	✓	✗
NTSC		✗	✓
PAL		✗	✓

Note: If the auto-adjust feature fails to result in a properly framed image, please make sure the VGA signal is bright, and fully edge-to-edge, then reboot the unit.

9. ACRONYMS

ACRONYM	COMPLETETERM
NTSC	National Television System Committee
PAL	Phase Alternating Line
PC	Personal Computer
VGA	Video Graphics Array
WUXGA (RB)	Widescreen Ultra Extended Graphics Array (Reduced Blanking)