CM-388N

HDMI to CV/SV Converter with HDMI Bypass

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 DD/MM/YY	SUMMARY OF CHANGE
RDV1	17/05/13	Preliminary Release
RDV2	30/08/13	HDCP Printing

CONTENTS

1. INTRODUCTION

The HDMI to CV/S-Video Converter is designed to convert the digital signal from HDMI (or DVI) source to analog signal of NTSC or PAL system, with L/R stereo audio. As well as S-Video and Composite video outputs, it also provides an HDMI bypass output to deliver the original signal, and a Coaxial output to send S/PDIF digital audio to an amplifier. Not only these, the device also has manual selection of underscan and overscan on output image to ensure the screen best fit for viewer's pleasantation. And, the model has a special Apple Mode switch which allows user to use Apple TV or other Apple devices as source equipment.

2. APPLICATIONS

- HDMI to Composite Video or S-Video signal conversion
- HDMI to NTSC/PAL system conversion
- HDMI to SD resolution for recordgin/monitoring

3. PACKAGE CONTENTS

- 1 x HDMI Repeater with Video Output
- 1 x 5V/2.6A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

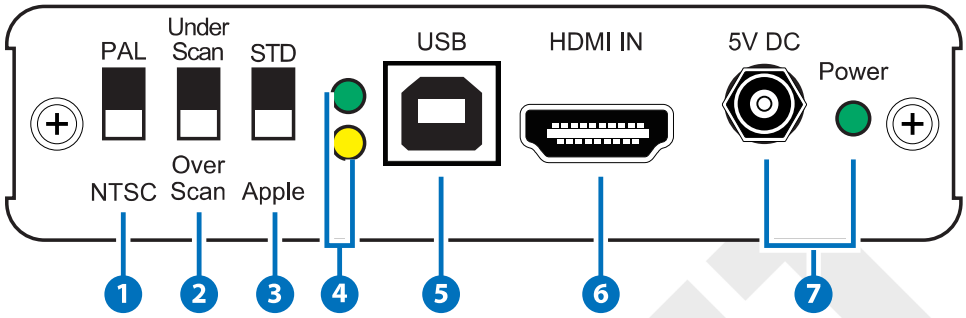
Source equipment such as PC/Laptor or HDMI camcorder and display devices such as TV/monitor with HDMI connection cables.

5. FEATURES

- HDMI, HDCP and DVI compliant
- Converts video signal from HDMI source to NTSC or PAL signal (selectable)
- Converts digital audio from HDMI source to analog stereo audio
- Accepts a wide range of HDTV input resolutions, from 480i to 1080p@60Hz and PC from VGA@60Hz to WUXGA@60Hz (RB)
- Supports Coaxial input audio sample rate 44.1KHz, 48KHz and 96KHz
- Output image overscan or underscan switch ensure best fit on screen
- Apple Mode switch guarrantees the use of Apple devices

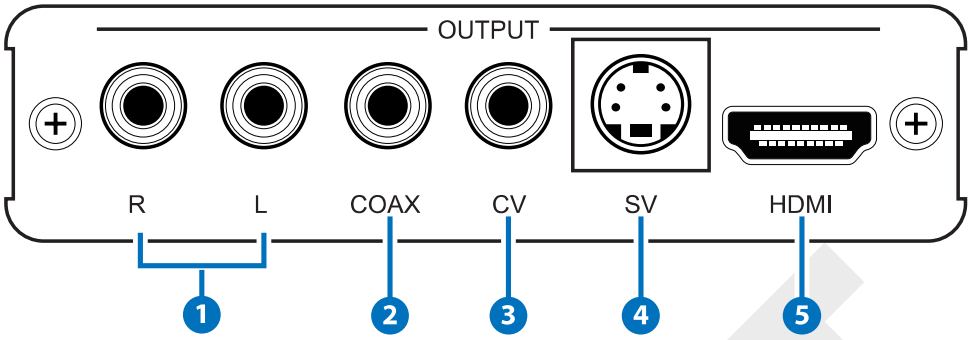
6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1. **PAL/NTSC Switch:** Select the required format for output display.
2. **UnderScan/OverScan Switch:** Select the required screen for output display.
3. **STD/Apple Switch:** Switch to Apple mode when the connected HDMI source equipment is an Apple device (such like Apple TV), otherwise, switch to STD mode.
4. **LED:** The yellow LED will illuminate when Apple Mode is selected, and the green LED will illuminated for STD mode.
5. **USB:** This slot is reserved for firmware update only.
6. **HDMI IN:** Connect to the HDMI output of a source equipment such as an PC/Laptop or HDMI camcorder.
7. **5V DC & Power LED:** Connect the 5V DC power supply into the unit and plug the adaptor to AC wall outlet. The LED will illuminate when power supply is connected.

6.2 Rear Panel



1. **R/L OUTPUT:** Connect to active speaker with RCA cables for sychronize video output with HDMI, S-Vide or Composite video.
2. **COAX OUTPUT:** Connect with active speaker wor amplifier with coaxial cable for sychronize video output with HDMI, S-Video or Composite video.
3. **CV OUTPUT:** Connect to the Composite Video input of a display or recording device.
4. **SV OUTPUT:** Connect to S-Video input of a display or recording device.
5. **HDMI Bypass OUTPUT:** Connect to the HDMI input of a display.

6.3 Supported Resolutions

HD Resolutions	PC Resolutions
480i/p@60	640x4480@60,72,75,85
576i/p@50	720x400@70
720p@50/60	800x600@56,60,72,75,85
1080p@24	1024x768@60,70,75,85
1080i@50/60	1152x864@70,75,85
1080p@50/60	1280x720@60(CVT)
	1280x768@60,60(RB)
	1280x800@60,60(RB0,75
	1280x960@60
	1280x1024@60,75
	1366x768@60,60(RB)
	1400x1050@60,60(RB)
	1440x900@60,60(RB),75
	1600x900@60(RB)
	1600x1200@60
	1680x1050@60,60(RB)
	1920x1200@60(RB)

Note: *DVI source input does not support 480i and 576i.*

6.4 Supported Audio

AV Source / Audio Output	HDMI with Embedded Audio
HDMI Bypass	Yes
Coaxial Audio	Yes
Stereo Audio	Yes (Input audio supports LPCM 2CH)

6.5 Video and Audio Conversion/Bypass Options

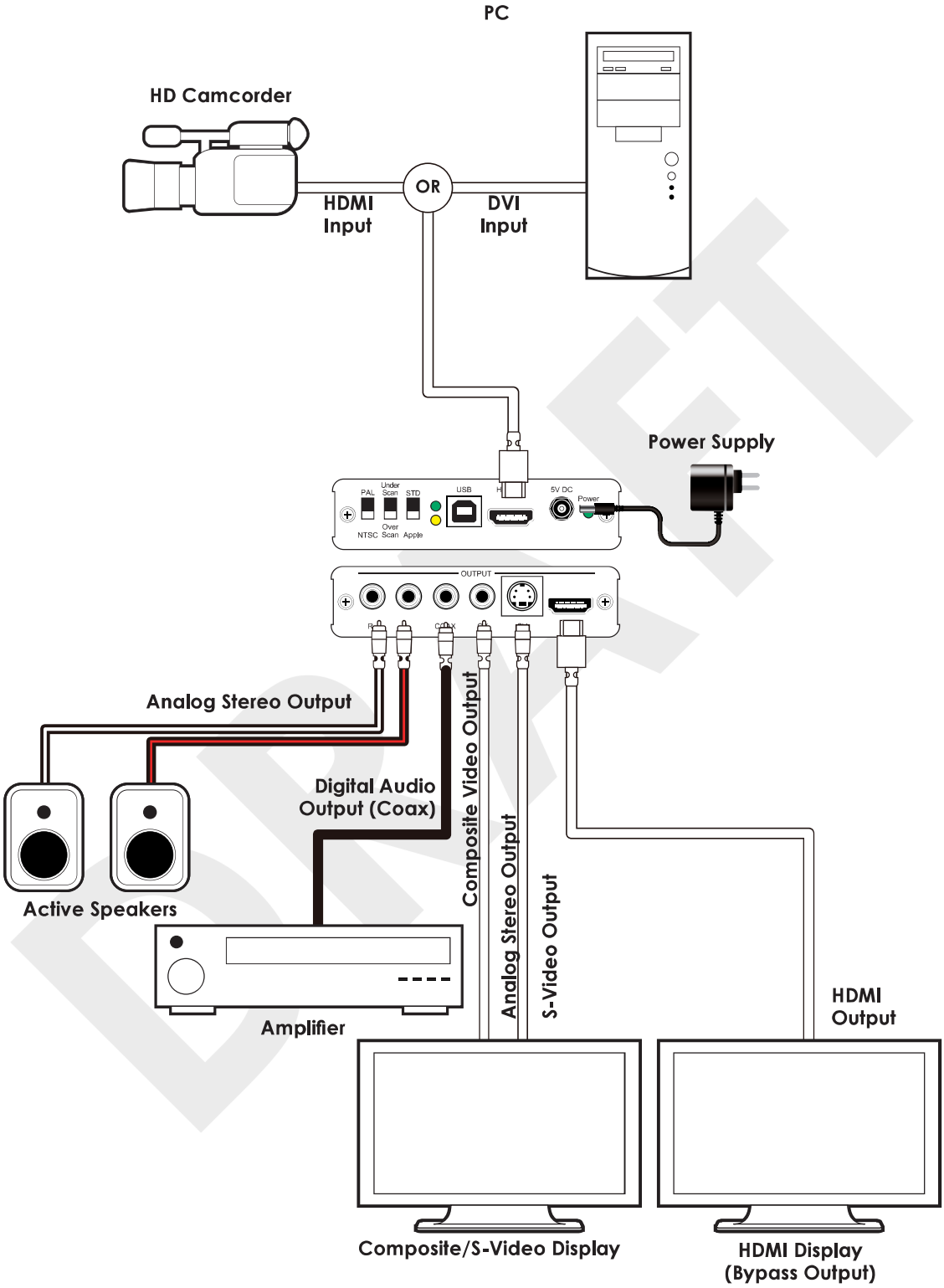
INPUT	Both vido and audio from HDMI source
OUTPUT	HDMI → Bypass, output original video and audio from HDMI
	COAXIAL → output digital audio from HDMI
	CV+R/L Audio → Ouput analog video/ audio converted from HDMI
	SV+R/L Audio → Output analog video/ audio converted from HDMI

Note: *1. For DVI input or output you will need to use an HDMI to DVI adaptor or cable.*

2. When the signal from an HDMI or DVI source is protected by HDCP, the HDMI or DVI display also needs to support HDCP to be able to show the content.

3. When receiving content that has HDCP encryption, the Composite Video and S-Video outputs will not display an image.

8. CONNECTION DIAGRAM



9. SPECIFICATIONS

Input port	1 x HDMI type A, 1 x USB type-B
Output Ports	1 x HDMI type A, 1 x Coaxial, 1 x Stereo R/L RAC jack, 1 x Composite-Video RCA jack, 1 x S-Video
Power Supply	5V / 2.6A DC (US/EU standards, CE/FCC/UL certified)
Dimensions	102mm(W) x 146.5mm(D) x 25mm(H)
Weight	302g
Chassis Material	Aluminum
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 (non-condensing)
Power Consumption	3.5W

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