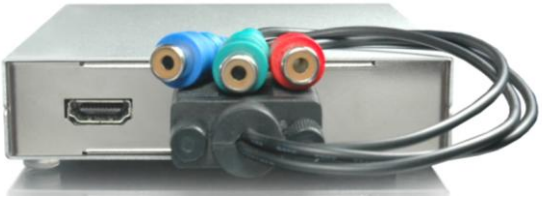
HD/SD-SDI to HDMI / DVI / Component / RGBHV Converter

User's Guide

Models

C-HDSDI-HDMI



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Section 1: Getting Started

1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
    - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
    - Repair or attempted repair by anyone not authorized by us.
    - Any damage of the product due to shipment.
    - Removal or installation of the product.
    - Causes external to the product, such as electric power fluctuation or failure.
    - Use of supplies or parts not meeting our specifications.
    - Normal wear and tear.
    - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 Safety Instructions

The C-HDSDI-HDMI, HD/SD-SDI to HDMI / DVI / Component / Composite / RGVHV converter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the C-HDSDI-HDMI should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

1.4 Introduction

Avenview C-HDSDI-HDMI provides high quality 12-bit conversion between SDI digital video input and HDMI / DVI digital video output or Component / Composite (CVBS) / RGBHV analog video outputs. Also, with an extra DVI output through HDMI type A connector, users can have high definition video transmission path without analog conversion distortion. The C-HDSDI-HDMI supports both SD-SDI and HD-SDI formats (SMPTE 259M, SMPTE 292M), and also features 2 equalized SDI loop outputs.

- Supported HD Formats: 1080i @50/59.94/60Hz, 1035i @50/59.94/60Hz, 720p @50/59.94/60Hz
- Supports SD Formats: NTSC @ 59.94Hz, PAL @ 50 Hz
- Excellent quality 12-bit A/D conversion
- Default SDI / Component / DVI Patterns
- Auto HD/SD-SDI detection
- SD Output: HDMI (video only) / DVI / Component
- HD Output: HDMI (video only) / DVI / Component / RGB
- Equipped with 2 extra equalized loop outs
- External DIP switch configuration
- Easy installation

1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

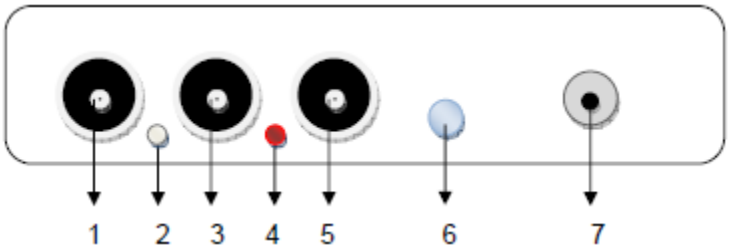
- C-HDSDI-HDMI x 1
- Power Adapter (+5VDC, 4A) x1
- VGA to Component Adapter x1
- HDMI to DVI Adapter x1
- User's Manual x1

1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.
- Don't place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

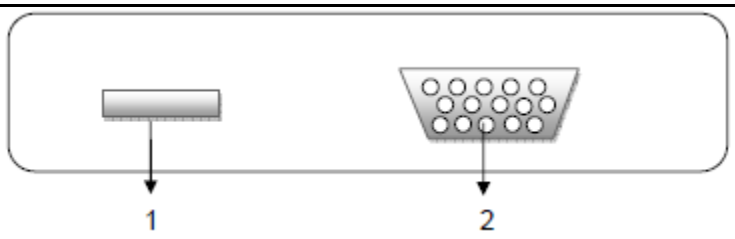
1.7 Panel Description

FRONT PANEL



1. HD/SD-SDI Input	2. HD/SD Bi-Color LED (Green = HD, Orange = SD)
3. HD/SD-SDI Output 1	4. Power indicator
5. HD/SD-SDI Output 2	6. IR Receiver (reserved)
7. Power Connector	

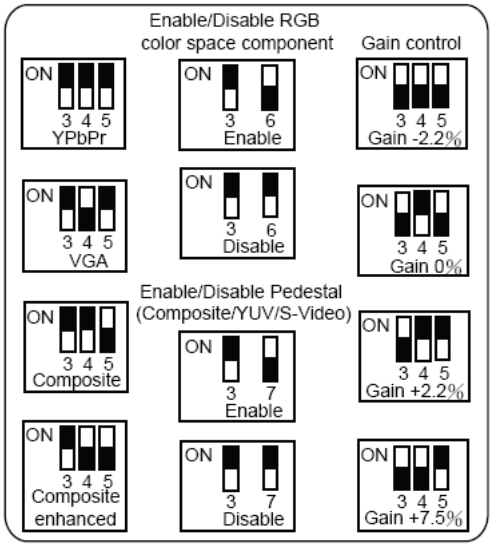
REAR PANEL

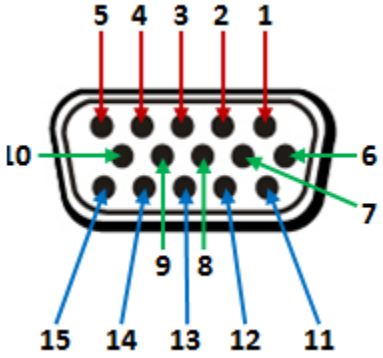


1. HDMI Output	2. Component / RGB Output

1.8 DIP Switch Configuration

8 Pin DIP switch is used for user interface, and users can access this switch from the bottom of the unit. Output formats, video patterns, SD pedestal, SD Wide, PAL mode, Component / RGB, SD Component or SD Composite, YC ON/OFF etc.





Pin 1	Pr / Red	Pin 2	Y / Green / Composite
Pin 3	Pb / Blue	Pin 4	Ground
Pin 5	Ground	Pin 6	Ground
Pin 7	Ground	Pin 8	Ground
Pin 9	+5V	Pin 10	Ground
Pin 11	Ground	Pin 12	Reserved
Pin 13	Horizontal SYNC	Pin 14	Vertical SYNC
Pin 15	Reserved		

1.9 General Troubleshooting

Problem	Possible Solution
No Image	• Check if connection to the source and the display are correct.
Screen Defects Appear	• Check the cable connections

Section 2: Specifications

Item	Description
Video Bandwidth	270 Mbps, 1.485 / 1.001 Gbps
Input Signal	HD/SD-SDI (SMPTE 259M, SMPTE 292M, SMPTE 296M)
Output Signal	HDMI (video only) / DVI 1.1 / Component / RGBHV
Input Transmission Range	150 meter (500 feet) at HD-SDI
Loop Output	2 equalized SDI
Power Supply	5V DC, 4Amp
Dimension (L x W x H)	4.7” x 4.3” x 1”
Weight	420g (15oz)

Environmental

Operation	0˚ to 50˚C Degree

2.1 Format Specifications

HD Input		Component Out
525p @ 59.94Hz	SMPTE 293M, ITU-BT.1358	
625p @ 50Hz	IT-BT.1358	
720p @ 50Hz	SMPTE 296M-3	√
720p @ 60 / 59.94 Hz	SMPTE 296M-1,2	√
1080i @ 25Hz	SMPTE 274M-6	√
1080i @ 30 / 29.97Hz	SMPTE 274M-4,5	√
1080p @ 24 / 23.98Hz	SMPTE 274M-10,11	√
1080p @ 25Hz	SMPTE 274M-9	√
1080p @ 30 / 29.97Hz	SMPTE 274M-7,8	√
SD Input		
NTSC		√
PAL B, D, G, H, I		√

HD Output		DVI / HDMI Out
525p @ 59.94Hz	SMPTE 293M, ITU-BT.1358	
625p @ 50Hz	IT-BT.1358	
720p @ 50Hz	SMPTE 296M-3	√
720p @ 60 / 59.94 Hz	SMPTE 296M-1,2	√
1080i @ 25Hz	SMPTE 274M-6	√
1080i @ 30 / 29.97Hz	SMPTE 274M-4,5	√
1080p @ 24 / 23.98Hz	SMPTE 274M-10,11	√
1080p @ 25Hz	SMPTE 274M-9	√
1080p @ 30 / 29.97Hz	SMPTE 274M-7,8	√
SD Output		
NTSC		√
PAL B, D, G, H, I		√

HD Input		VGA Out
525p @ 59.94Hz	SMPTE 293M, ITU-BT.1358	
625p @ 50Hz	IT-BT.1358	
720p @ 50Hz	SMPTE 296M-3	√
720p @ 60 / 59.94 Hz	SMPTE 296M-1,2	√
1080i @ 25Hz	SMPTE 274M-6	
1080i @ 30 / 29.97Hz	SMPTE 274M-4,5	
1080p @ 24 / 23.98Hz	SMPTE 274M-10,11	
1080p @ 25Hz	SMPTE 274M-9	
1080p @ 30 / 29.97Hz	SMPTE 274M-7,8	
SD Input		
NTSC		
PAL B, D, G, H, I		

HD Output		Composite Out
525p @ 59.94Hz	SMPTE 293M, ITU-BT.1358	
625p @ 50Hz	IT-BT.1358	
720p @ 50Hz	SMPTE 296M-3	
720p @ 60 / 59.94 Hz	SMPTE 296M-1,2	
1080i @ 25Hz	SMPTE 274M-6	
1080i @ 30 / 29.97Hz	SMPTE 274M-4,5	
1080p @ 24 / 23.98Hz	SMPTE 274M-10,11	
1080p @ 25Hz	SMPTE 274M-9	
1080p @ 30 / 29.97Hz	SMPTE 274M-7,8	
SD Output		
NTSC		√
PAL B, D, G, H, I		√

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