



3G/HD/SD-SDI to HDMI Converter



Model #: C-3GHDSDI-HDM

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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 Avenview C-3GHDSDI-HDM, 3G/HD/SD-SDI to HDMI Converter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment's, the C-3GHDSDI-HDM 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

The Avenview C-3GHDSI-HDM provides a cost effective way to convert 3G/HI/SD-SDI signal to HDMI compliant format. The conversion between SDI and HDMI is pure digital and guarantees no loss transformation for both audio and video. Plus, with up to 8 channels audio support, 7.1 channel or 5.1 channel audio becomes available. The C-3GHDSI-HDM also provides 2 low jitter and re-clocked outputs for daisy chain or multiple monitors.

C-3GHDSI-HDM

CABLE INDEX

- Output
- Input / Source



- Supported 3G formats(SMPTE 425M, Level A):
1080p @50/59.94/60Hz (4:2:2)
- Supported high-definition (HD) formats:
1080i @50/59.94/60Hz, 1035i @50/59.94/60Hz, 720p @50/59.94/60Hz
- Supported standard-definition (SD) formats: NTSC @59.94Hz, PAL @50Hz
- Auto 3G/HD/SD-SDI detection
- Two equalized and re-clocked loop outputs
- External DIP Switch Configuration

1.5 Package Contents

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

- | | |
|-----------------------------|-----|
| - C-3GHDSDI-HDM | x 1 |
| - Power Adapter (+5VDC, 4A) | x 1 |
| - User's Manual | x 1 |

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.

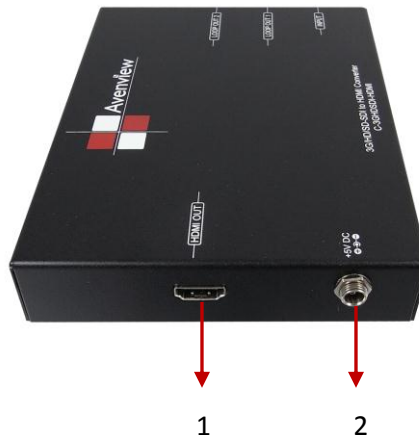
1.7 Panel Description

1.7.1 Front Panel



| | |
|----------------------------|----------------------------|
| 1. 3G/HD/SD-SDI Input | 2. Lock LED |
| 3. 3G/HD/SD-SDI Loop Out 1 | 4. 3G/HD/SD-SDI Loop Out 2 |

1.7.2 Rear Panel



| | |
|----------------|------------------|
| 1. HDMI Output | 2. 5V Power Jack |
|----------------|------------------|

1.7.3 Bottom Panel (DIP SWITCH)

A 4-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, YPbPr / RGB, SD component or SD composite, YC on/off etc.

| PIN # | 1 | 2 | 3 | 4 |
|-------|-----------|-------------|-------------------|----------------|
| OFF ↑ | HDMI Mode | 7.1 Channel | Audio Group 1 & 2 | Audio Mute OFF |
| ON ↓ | DVI Mode | Stereo | Audio Group 3 & 4 | Audio Mute ON |

1. C-3GHDSI-HDM mainly checks the audio channel in audio group 1&2 or 3&4. Please adjust DIP switch pin 3 for setup.
2. Some HDMI equipped TV may not be able to decipher multiple channel audio, and therefore set DIP switch pin-2 to ON(↓) to get stereo audio work and then check if multiple channel support is available.
3. While DIP Switch pin-4 is set to OFF(↑), 3G Level B will be automatically converted to Level A.
4. C-3GHDSI-HDM supports only audio sample frequency 48kHz.
5. While stereo audio is chosen, CH 1 & 2 of Group 1 or 3 are output.

Section 2: Specifications

| Item | Description |
|------------------------------------|--|
| Units | C-3GHDSDI-HDM |
| Unit Description | 3G/HD/SD-SDI to HDMI Converter |
| SDI Standards | 3G-SDI, HD-SDI, SD-SDI |
| Auto 3G/HD/SD-SDI Detection | Yes |
| Video Bandwidth | 3G: 1080p @50/59.94/60Hz (4:2:2) HD: 720p @50/59.94/60Hz, 1035i @50/59.94/60Hz, 1080i @50/59.94/60Hz SD: NTSC @59.94Hz, PAL @50Hz |
| Input Signal | 3G-SDI: SMPTE 424M/425M HD-SDI: SMPTE 292M, 296M SD-SDI: SMPTE 259M |
| Output Signal | HDMI |
| Audio Mode | 7.1 / 5.1 / Stereo |
| Eye Pattern Characteristics | Extra low alignment jitter 0.05µi at HD |
| Cable Equalization | 3G-SDI: up to 60m (200 feet) HD-SDI: up to 150m (500 feet) SD-SDI: up to 300m (1000 feet) |
| Loop Out | 2 equalized and re-clocked SDI Loop Outs |
| Audio Support | Yes |
| Input | BNC x 1 (SDI) |
| Output | HDMI x 1 BNC x 2 (SDI) |
| BNC Connector | 3G 75Ω inter-locked socket |
| HDMI Connector | Type A (19 pin female) |
| DIP Switch | 4 pin (output format / audio format / audio group / 3G level) |
| Dimensions (L x W x H) | 6.9" X 4.7" x 1" |
| Power Supply | 5V 4A DC |
| Power Consumption | 3 Watts (max) |
| Environmental | |
| Operating Temperature | 32° ~ 104°F (0° to 40°C) |
| Storage Temperature | -4° ~ 140°F (-20° ~ 60°C) |
| Relative Humidity | 20~90% RH (no condensation) |

2.1 Supported Resolutions

| 3G-SDI Input | |
|-----------------------|-----------------------|
| 1080p @ 60/59.94/50Hz | C- SMPTE 425M (4:2:2) |
| HD-SDI Input | |
| 720p @ 50Hz | SMPTE 296M -3 |
| 720p @ 60 / 59.94Hz | 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-SDI Input | |
| NTSC | |
| PAL B, D, G, H, I | |



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