

# SC-HD2SDI

## HDMI / DVI to SDI Converter

Converts DVI or HDMI (with no HDCP) to SDI, HD-SDI, or 3G-SDI,  
Supports Embedded Audio



UMA1242, Rev. n/c

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## FCC RADIO FREQUENCY INTERFERENCE STATEMENT

This device complies with part 15 Class A of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



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# 1. Specifications

HDMI Bandwidth	225MHz/link
Resolutions Supported	480i, 576i, 720p@50/60 1080i@50/60 1080p@24/25/30/50/60
TMDS Signal Level	3.3 volts
DDC Signal Level	5.0 volts
ESD Protection	±8kV (air-gap discharge) ±4kV (contact discharge)
Max Coaxial Cable Length (with quality RG-6U)	Full HD up to 70 m (230 ft) HD up to 122 m (400 ft) SD up to 153 m (500 ft)
Dimensions (each side)	1.18" H x 2.75" W x 3.85" D (30mm H x 70mm W x 98mm D)
Weight (each side)	Product - 0.75 lb (0.35 kg) Shipping - 1.5 lbs (0.70 kg)
Power Supply (each side)	external Input: 100 ~240 Vac, 50/60 Hz ; Output 5 Vdc, 1 A
Power consumption	2.3 watts per side
Operation temperature:	+32 to +122 °F (0 to +50 °C)
Storage temperature:	-40 to +158 °F (-40 to +70 °C)
Relative humidity:	20~90% (non-condensing)

## 2. Overview

### 2.1 Introduction

The SC-HD2SDI is an HDMI to SDI Converter with two identical SDI outputs (built-in 2-channel splitter). It automatically detects and converts DVI or HDMI video (without HDCP content protection) to SDI, HD-SDI, or 3G-SDI. The type of SDI is determined by the resolution of the input video. It supports HDMI embedded audio, and if audio is present, it will be passed to the SDI outputs.

To ensure that the video source produces a video resolution that is supported by the converter, the converter's input has an EDID table which lists the supported resolutions. Standard TV and HDTV resolutions are supported including 486i/576i, 720p, 1080i, and 1080p. The SDI outputs can drive RG-6U cables to over 200 ft.

The product is perfect for converting PC or HDTV digital video to SDI format for use with professional SDI products such as matrix switchers and video editing gear.

### 2.2 Features

- Supports resolutions up to 1920x1080 at 60 Hz
- No user settings, plug-n-play
- Two simultaneous SDI outputs
- HDCP compliant (if there is HDCP on the input, the SDI outputs will be cut off)
- Uses Locking HDMI connector

## SC-HD2SDI

### 2.3 What's Included

- Converter Box
- This user's manual
- Power Supply

### 2.4 Hardware Description

The following figures show all connectors and indicators on the unit.



## 3. Installation

1. Plug one or both SDI outputs to desired devices. Make sure to use quality SDI rated RG-6U cables.
2. Plug in the power supply

3. Connect the HDMI input to any DVI or HDMI source. Note that the input video resolution and refresh rate must be one supported by the converter (see specifications). Additionally for HDCP compliance, if the HDMI input signal is encrypted with HDCP (content protected), then the SDI outputs will be blank.
- 4.

## 4. Troubleshooting

There is no adjustments or settings. If there is no SDI output, check the length and quality of the RG-6U cables (use short cables for test). Make sure if using HDMI video source that it is not content protected (no HDCP). When content protected input is detected, output will be blanked). If connected to a DVI source make sure the resolution of signal is set to one supported by the converter.

### 4.1 Contacting Hall Research

If you determine that your Converter is malfunctioning, do not attempt to repair the unit. Contact Hall Research Technical Support department to obtain a RMA (Return Authorization) number. Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description.



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