

## 4 Port HD/SD-SDI Splitter

### User's Guide



Models

SPLIT-HDSDI-4

# HDSDI



© 2008 Avenview Inc. All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and disclaims any express or implied warranty, relating to its products including, but not limited to, the implied warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property right.

Reproduction of this manual, or parts thereof, in any form, without the express written permission of Avenview Inc. is strictly prohibited.

## Table of Contents

Section 1: Getting Started .....	3
1.1 Important Safeguards .....	3
1.2 Safety Instructions .....	3
1.3 Regulatory Notices Federal Communications Commission (FCC) .....	4
1.4 Introduction .....	4
1.5 Features .....	4
1.6 Package Contents.....	4
1.7 Before Installation.....	5
1.8 Panel Description .....	5
Section 2: Installation.....	6
Section 3: Specifications.....	7

## 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 SPLIT-HDSDI-4, 4 Port HD/SD-SDI splitter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SPLIT-HDSDI-4 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.

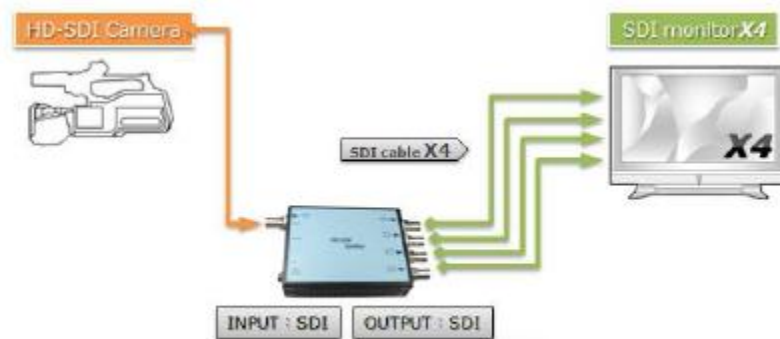
## 1.3 Regulatory Notices Federal Communications Commission (FCC)

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 SPLIT-HDSDI-4 receives one SDI input, perfectly duplicates it, and re-transmits four SDI outputs for real time multi-viewing. It is a reliable video device splitting a SDI or HD-SDI video source to four HD-SDI or SD-SDI displays at the same time.



## 1.5 Features

- HD/SD dual-rate distribution
- Four separately buffered outputs
- HD cable equalization (Beldon 1694A)
- Dual color LED indication of input lock and rate
- Pass all ancillary data
- Provides automatic input cable equalization up to 300m (1000ft)
- Inter-locked power supply for better fixedness
- Easy installation

## 1.6 Package Contents

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

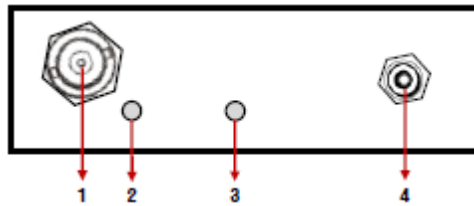
- |                         |     |
|-------------------------|-----|
| - SPLIT-HDSDI-4         | x 1 |
| - Power Adapter (+5VDC) | x1  |
| - User's Manual         | x1  |

## 1.7 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.

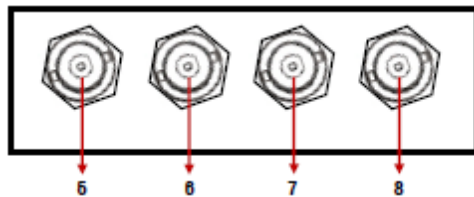
## 1.8 Panel Description

### FRONT PANEL



1. HD/SD-SDI Input	2. LED – Reserved
3. LED – Power Indicator	4. 5V DC Power Jack

### REAR PANEL



5. HD/SD-SDI Output 1	6. HD/SD-SDI Output 2
7. HD/SD-SDI Output 3	8. HD/SD-SDI Output 4

### Bottom Panel



These DIP switches are reserved for the SPLIT-HSDSI-4-RS or SPLIT-HSDSI-6-RS that has re-clocking functionalities.

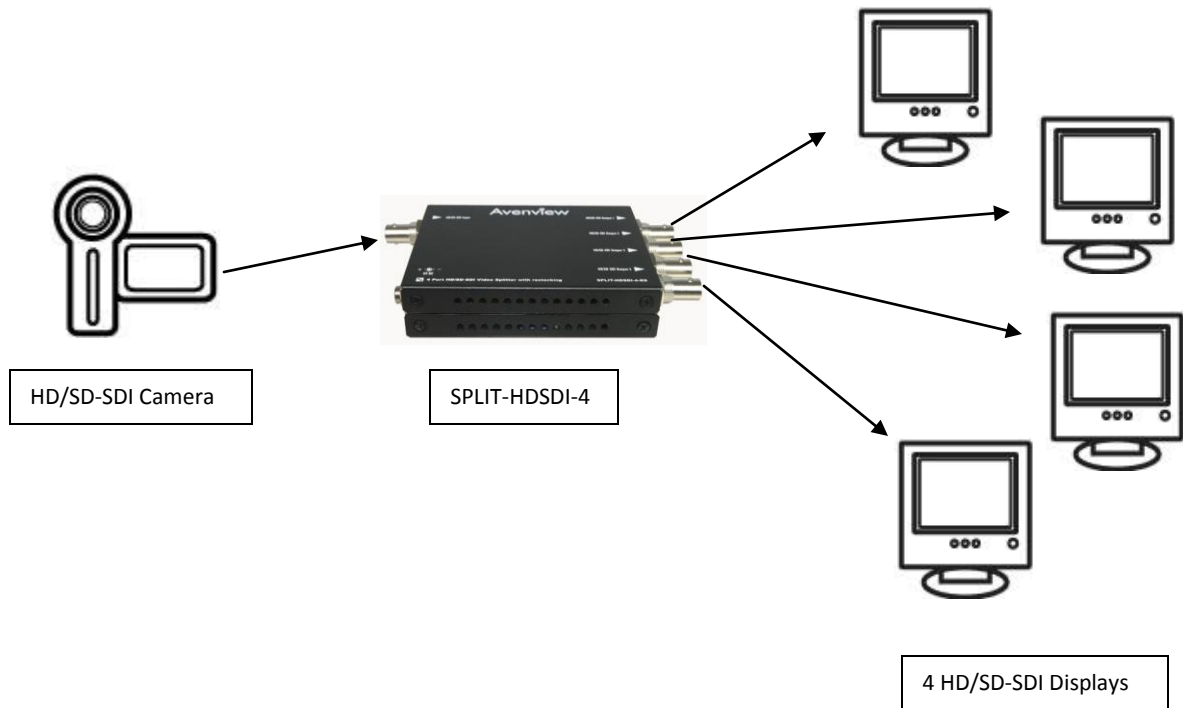
No use for this model.



## Section 2: Installation

Follow these instructions for installation of SPLIT-HDSDI-4:

1. Ensure SPLIT-HDSDI-4 and all other source devices are turned off
2. Connect a camera or other HD/SD-SDI device to Input of SPLIT-HDSDI-4
3. Connect devices equipped with HD/SD-SDI inputs (e.g. monitors or video processors) to SPLIT-HDSDI-4 outputs
4. Turn ON all devices connected to output of SPLIT-HDSDI-4
5. Plug power adapter to 5V DC power jack of SPLIT-HDSDI-4



### Section 3: Specifications

Item	Description
Model	SPLIT-HDSDI-4
SDI Standards	SD-SDI & HD-SDI
Auto HD/SD-SDI Detection	Yes
Supported Protocols	SMPTE 259M, SMPTE 292M / HDTV (1.485Gbps and 1.485/1.001Gbps)
Video Bandwidth	[1.485Gbps & 1.485/1.001Gbps]
Data Rates	270 / 1483 / 1485 Mbps
Supported Video	[HD] 720p50/59.94/60, 1035i50/59.94/60, 1080i50/59.94/60, 1080p24/30 [SD] NTSC@59.94Hz, PAL@50Hz
SDI signal type	SMPTE-292M, SMPTE-259M
Output impedance	75Ω
Reclocking function	No
Cable equalization	[HD-SDI] up to 150m (500ft) / [SD-SDI] up to 300m (1000ft)
Audio support	Yes
RP-918 pathological patterns	Immune
Input Connectors	1x BNC [SDI]
Output Connectors	4x BNC [SDI]
BNC connector	75Ω inter-locked socket
Eye pattern characteristics	Amplitude: Within 800mV ±3% (<10%) Rise overshoot: Less than 2% (<10%) Fall overshoot: Less than 2% (<10%) Long time jitter: 0.195μ (<1.0μ) Timing jitter: 0.195μ (<1.0μ) Alignment jitter: 0.127μ (<0.2μ)
Dimensions	5.7" x 3.2" x 1" (L x W x H)
Weight	300g
Power Supply	5V 4A DC
Power Consumption	10 Watts (max)
Operating Temperature	0~40°C [32~104°F]
Storage Temperature	-20~60°C [-4~140°F]
Relative Humidity	20~90% RH [no condensation]



**Disclaimer**

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.