

# 6 Port HD/SD-SDI Splitter with Reclocking

# **User's Guide**



Models SPLIT-HDSDI-6-RS





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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 SPLIT-HDSDI-6-RS, 6 Port HD/SD-SDI splitter with reclocking 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-6-RS 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-6-RS 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
- 6 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
- Reclocking SDI signals for cascading and longer transmission

## 1.6 Package Contents

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

-	User's Manual	x1
-	Power Adapter (+5VDC)	XI
	Dower Adaptor (LEV/DC)	x1
-	SPLIT-HDSDI-6-RS	x 1

### **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. HD/SD-SDI Output 5	4. LED – Power Indicator
5. HD/SD-SDI Output 6	6. 5V DC power Jack

#### **REAR PANEL**



7. HD/SD-SDI Output 1	8. HD/SD-SDI Output 2
9. HD/SD-SDI Output 3	10. HD/SD-SDI Output 4



#### **Bottom Panel**

	0	N	
1	2	Ч	4

PIN 1 - OFF	PIN 2 – OFF	Auto rate detect (143 Mbps rate operation supported only in ARD mode)
PIN 1 - OFF	PIN 2 – ON	270 Mbps
<b>PIN 1 – ON</b>	PIN 2 – OFF	1483 / 1485 Mbps
PIN 3 - OFF		Automatically reclocks bypassed SDI signals
PIN 3 - ON		Force to bypass SDI signal
PIN 4 - OFF		Default Operation mode





## **Section 2: Installation**

Follow these instructions for installation of SPLIT-HDSDI-6-RS:

- 1. Ensure SPLIT-HDSDI-6-RS and all other source devices are turned off
- 2. Connect a camera or other HD/SD-SDI device to Input of SPLIT-HDSDI-6-RS
- 3. Connect devices equipped with HD/SD-SDI inputs (e.g. monitors or video processors) to SPLIT-HDSDI-6-RS outputs
- 4. Turn ON all devices connected to output of SPLIT-HDSDI-6-RS
- 5. Plug power adapter to 5V DC power jack of SPLIT-HDSDI-6-RS



# Section 3: Specifications

Item	Description
Model	SPLIT-HDSDI-6-RS
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	[1.485Gpbs & 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
<b>Reclocking function</b>	Yes
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	6x BNC [SDI]
BNC connector	75 $\Omega$ 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	335g
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]



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