



AV Connectivity, Distribution  
And Beyond....

**VIDEO WALLS VIDEO PROCESSORS**  
**VIDEO MATRIX SWITCHES**  
**EXTENDERS SPLITTERS WIRELESS**  
**CABLES & ACCESSORIES**

# 4 Port 3G/HD/SD-SDI

## Splitter/DA with Reclocking

### User's Guide



**Model #: SPLIT-3GHDSDI-4RS**



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## SECTION I: GETTING STARTED

### I.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.

### I.2 SAFETY INSTRUCTIONS




The **SPLIT-3GHDSI-4RS, 4 Port 3G/3G/HD/SD-SDI Splitter with Reclocking** have been tested for conformance to safety regulations and requirements, and have been certified for international use. However, like all electronic equipments, the SPLIT-3GHDSI-4RS 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.

Warning symbols	Description
	ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAL PARTS. THIS MAY RESULT IN ELECTRICAL SHOCK OR BURN.
	DO NOT TAMPER WITH THE UNIT. DOING SO WILL VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.
	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.

	<div> <b>WARNING</b></div> <p>Read &amp; understand user guide before using this device.</p> <p>Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.</p>
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## 1.4 INTRODUCTION




The Avenview SPLIT-3GHDSDI-4RS 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, HD-SDI or 3G-SDI video source to four SDI compliant displays at the same time.

## 1.5 FEATURES

- 3G/HD/SD triple-rate distribution
- Four separately buffered and reclocked outputs
- Cable equalization (Belden 1694A) and signal retiming
- Dual color LED indication of input lock and rate
- Pass all ancillary data
- Provides automatic input cable equalization up to 300m (1000ft)@SD, 150m (500ft)@HD and 60m(190ft)
- Reclocking SDI signals for cascading and thus longer transmission
- Inter-locked power supply for better fixedness

## 1.6 PACKAGE CONTENTS

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

I	- SPLIT-3GHDSDI-4RS	
I	- Power Adapter (+5V 4A DC)	
I	USER'S MANUAL	



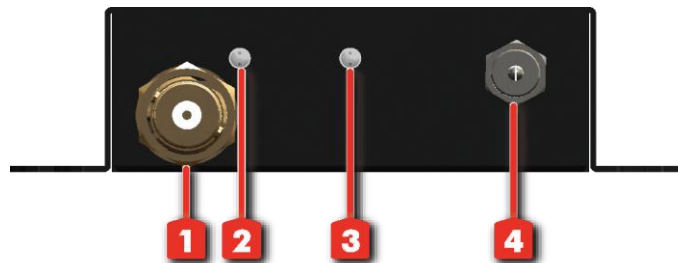
## 1.7 BEFORE INSTALLATION

- 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 coaxial cable. It can cause malfunction.

## SECTION 2: SPLIT-3GHDSDI-4RS

### 2.1 PANEL DESCRIPTION

#### FRONT PANEL



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

#### REAR PANEL



5. 3G/3G/HD/SD-SDI Output 1-4





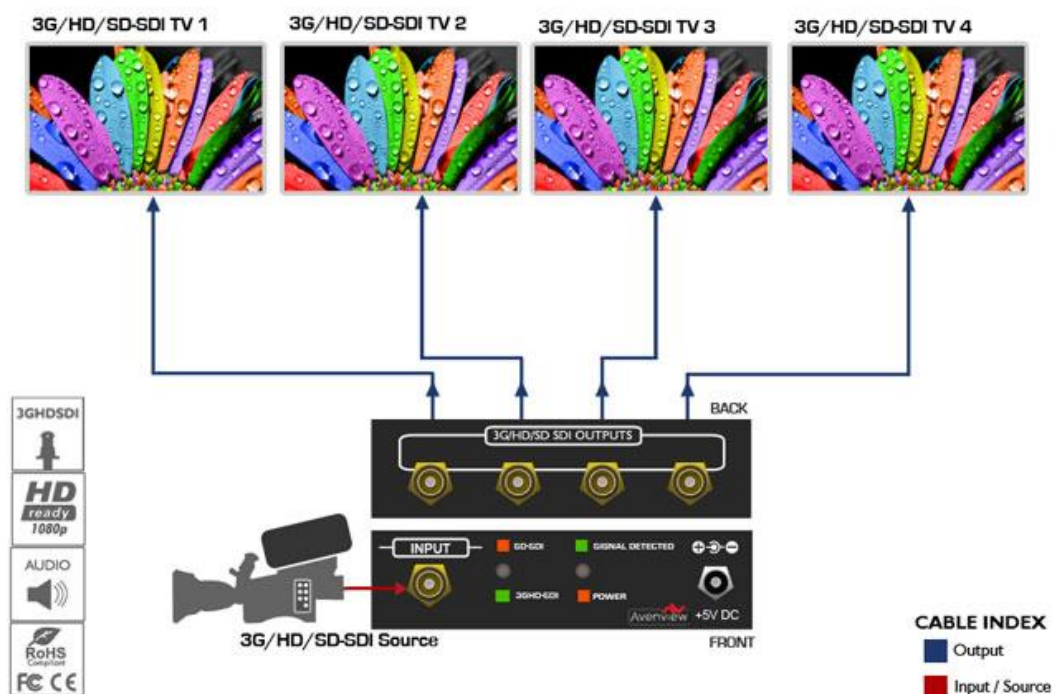
## 2.2 INSTALLATION

Follow these instructions for installation of SPLIT-3GHDSDI-4RS:

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

### SPLIT-3GHDSDI-4-RS

3G = 60m (190 feet)  
HD 720p50/59.94/60 = 150m (500 feet)  
1035i50/59.94/60, 1080i50/59.94/60  
1080p24/30 = 150m (500 feet)  
SD NTSC@59.94Hz, PAL@50Hz = 300m (1000 feet)



### SECTION 3: SPECIFICATIONS

ITEM	DESCRIPTION
MODEL	SPLIT-3GHDSDI-4RS
SDI STANDARDS	SD/HD/3G-SDI
AUTO 3G/HD/SD-SDI DETECTION	Yes
SUPPORTED PROTOCOLS	SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE425M
VIDEO BANDWIDTH	[2.97Gpbs & 2.97/1.001Gbps]
DATA RATES	270 / 1483 / 1485 / 2970 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
RELOCKING FUNCTION	YES
CABLE EQUALIZATION	[3G] up to 60m (190ft) / [HD] up to 150m (500ft) / [SD] up to 300m (1000ft)
AUDIO SUPPORT	Yes
RP-918 PATHOLOGICAL PATTERNS	Immune
PCB STACK UP	4-layer board [impedance control — differential 100Ω; single 50Ω]
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 (Inter-locked power supply)
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]







### Plug

Letter	Millimeters	
	Minimum	Maximum
A	0.72	0.76
B	Flared to meet good electrical contact	
C	7.70	7.80
D	4.55	5.05
E	4.55	4.85
F	0.92	1.42

### Jack

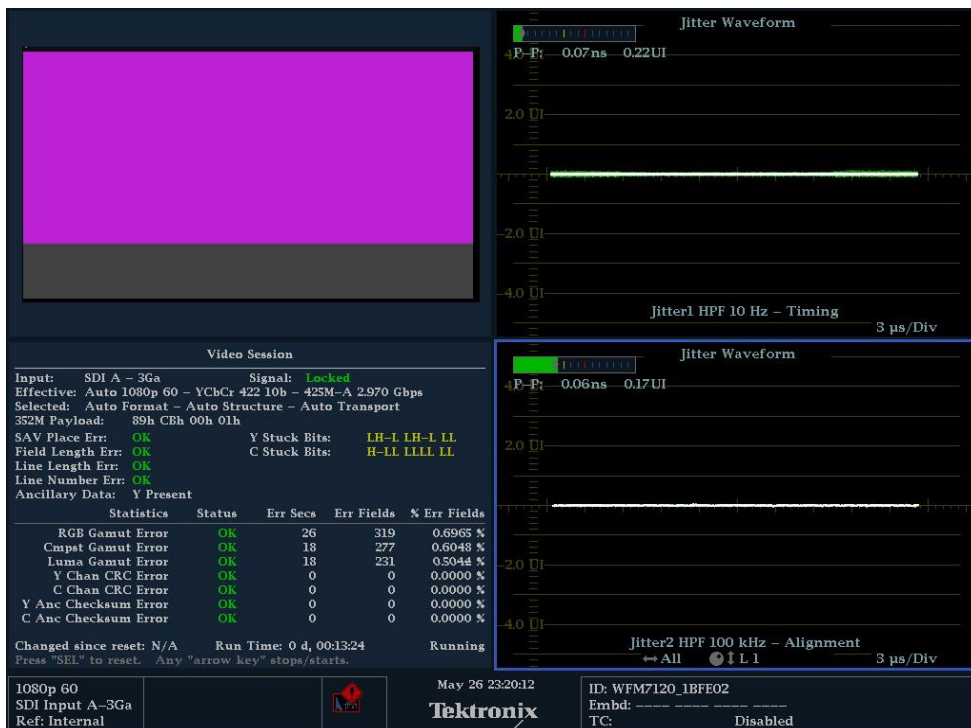
Letter	Millimeters	
	Minimum	Maximum
A	8.99	9.09
B	7.44	7.54
C	6.65	6.75
D	6.22	6.27
E	7.82	—
F	4.35	4.55
G	3.85	4.35
H	1.27	1.43
J	4.32	4.42

#### NOTE:

SIGNAL MEASUREMENTS RESULTS WAS TESTED BY TEKTRONIX MEASUREMENT DEVICE USING BELBEN 1694A HD/SDI 18 AWG LOW LOSS SERIES DIGITAL COAX CABLE.RG-6/U TYPE, 18 AWG SOLID .040" BARE COPPER CONDUCTOR, GAS-INJECTED FOAM HDPE INSULATION, DUOFOIL® + TINNED COPPER BRAID SHIELD (95% COVERAGE), PVC JACKET



## SECTION 4: SIGNAL MEASUREMENTS





## TECHNICAL SUPPORT

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### CONTACT US



Phone: 1 (866) 508 0269



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