Specifications

Environment	12G-SDI, 6G-SDI, 3G-SDI, HD-SDI & SD-SDI.
Devices	Camera, projectors, monitors, TV.
Transmission	Transparent to the user.
Detection	Auto Detection of the 12G/6G/3G/HD/SD-SDI Signal.
Bandwidth	11.88bps & 11.88/1.001Gbps
Data Rates	1.485, 2.97, 5.96 & 11.88 Gbps
Output Impedance	75Ω
Signals	SDI protocol.
Supported Resolution	12G-SDI: 2160p50/59.94/60Hz (4:2:2) 6G-SDI: 2160p23.98/24/25/29.97/30Hz (4:2:2) 3G-SDI: 1080p50/59.94/60Hz (4:2:2) HD-SDI: 1080p/23.98/24/25/29.97/30Hz 720p/50/59.94/60Hz 1080i/50/59.94/60Hz SD-SDI: NTSC (59.94Hz), PAL (50Hz)
Audio	Up to 8 Audio Channels.
Ancillary Data	Supported
Input Signal	12G-SDI : SMPTE ST2082 6G-SDI : SMPTE ST2081 3G-SDI: SMPTE 424M, 425M HD-SDI: SMPTE 292M, 296M SD-SDI : SMPTE 259M, 344M
Connectors	One (1) BNC Female 75 Ohms, Gold Plated for input. Four (4) BNC Female 75 Ohms, Gold Plated for outputs. One (1) Locking Barrel Jack 2.1mm Power Connector. *Note: RG59 coaxial cables not included.*
Cable Equalization	12G-SDI up to 230ft (70m) 6G-SDI up to 330ft (100m) 3G-SDI up to 594ft (180m)
Cable	RG-59 or better cable required.
Power Supply	One (1) 110-240V/5VDC power supply with interchangeable blades.
Power Consumption	3.0 Watt (Max)
Temperature	Operating: 0° to 40°C Storage: -20° to 60°C Humidity: Up to 90% non-condensing
Enclosure	Metal
Dimensions	3.19" x 1.61" x 0.95" (81mm x 41mm x 24mm)
Weight	0.37lbs (0.17kg)
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0
Warranty	2 years
Order Information	500727 12G-SDI 1x4 Splitter, 4K/60

MuxLab BROADCAST
2321 Cohen Road, Saint-Laurent, Quebec, Canada. H4R 2N7
Tel: (514) 905-0588 Fax: (514) 905-0589
Toll Free (North America): (877) 689-5228
E-mail: info@muxlab.com URL: www.muxlab.com

12G-SDI 1X4 Splitter, 4K/60

500727

Quick Installation Guide

Overview

The 12G-SDI 1x4 Splitter, 4K/60 (500727) allows one (1) 12G/6G/3G/HD/SD-SDI source to be distributed and amplified to up to four (4) 12G/6G/3G/HD/SD-SDI displays. The splitter supports up to 4K (3840 X 2160) video and HD audio, including 480i (SD-SDI), 720p/1080i (HD-SDI), 1080p (3G-SDI), 4K/30 (6G-SDI) and 4K/60 (12G-SDI). The device automatically detects the 12G/6G/3G/HD/SD-SDI signal and re-clocks and regenerates the signal at the output for extending distances between source and displays. Additionally, all connectors are on the rear panel for neater cabling.

Applications

Applications include video production, broadcasting, outside broadcasting vehicle, SDI camcorder, studio-to-studio, post-production, live events, medical imaging display, mobile video.

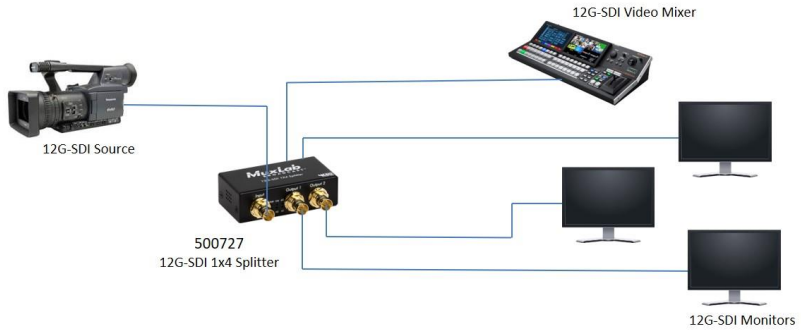
Installation

1. Identify the connectors on the 12G-SDI 1x4 Splitter as indicated on the product labels above.
2. Connect the source to the 12G-SDI Input of the splitter.
3. Connect up to four (4) display(s) to the 12G-SDI Outputs of the splitter.
4. Connect the 5 VDC power supply to the splitter first, and then plug the power supply into an AC power outlet. If power is present, the power LED of the

splitter will be illuminated.

Note: Power ON the 12G-SDI 1x4 Splitter, 4K/60 only after all connections are made.

5. Power the equipment and verify the image quality.
6. The appropriate Data Rate LED will be ON to show the input signal rate speed and that the signal is locked.
7. The following diagram shows the final configuration.



One 12G-SDI source may be connected to up to Four (4) 12G-SDI destination devices

Output Pairing

The outputs of this device work in pairs. Due to the high frequency and low jitter requirement for 12G-SDI signals, to have the best performance it is strongly recommended to use a 75ohm terminator if a paired SDI output port is not in use.

Please see the following table for the 12G-SDI output pairing:

	Output Port
Pair A	Output 1 & 2
Pair B	Output 3 & 4

Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions with respect to the installation of the 12G-SDI 1x4 Splitter, 4K/60:

Symptom	**Probable Cause**	**Possible Solutions**
No Image	No power	• Check power connections
No Image	Source	• Check if the source is sending a signal.
No Image	Resolution	• Check if the source resolution is valid.
No Image	Coaxial Cable	• Check the coaxial cable.
No Image	Coaxial Cable distance	• Check the coaxial cable distance for the corresponding resolution (see Specifications table).
No Image	Coaxial Cable Quality	• Check the coaxial cable type. It should be an RG-59 or better coaxial cable.
Flickering Image	Synchronization	• Check the coaxial Cable Quality or distance.
Choppy sound	Synchronization	• Check the coaxial Cable Quality or distance.

If you still cannot diagnose the problem, please call MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).