



* MMF version shown

500767 3G-SDI/ST2110 over IP Uncompressed Gateway Converter Quick Installation Guide

Overview

The 3G-SDI/ST2110 over IP Uncompressed Gateway Converter allows HD-SDI and 3G-SDI equipment to be extended up to 100ft (30m) via UTP Cat 6a/7 cable or up to 1300ft (400m) via duplex multimode OM4 fiber with LC connectors, at up to 1080p resolution @ 60Hz uncompressed, in a point-to-point configuration. Point-to-multipoint and multipoint-to-multipoint configurations are also possible by connecting several units to a 10G Ethernet network. The unit provides a 1G Ethernet Switch port to connect additional network devices, and an RS232 port for remote control of end devices.

The 3G-SDI/ST2110 over IP Uncompressed Gateway Converter supports SMPTE ST-2110. It can be managed through its Web interface and RestAPI, please refer to the operation manual for further details about this.

Applications

Applications include commercial broadcast AV systems, news/sports/TV stations and movie networks/studios.

Installation

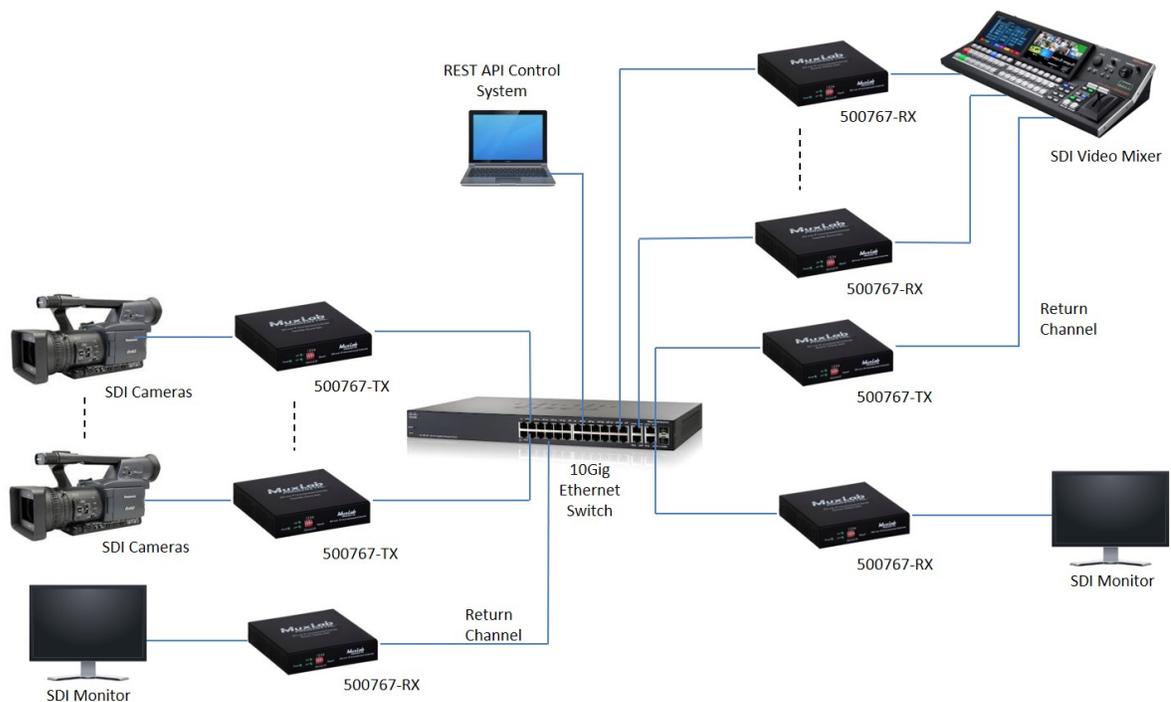
1. Identify the connectors on the Transmitter and Receiver as indicated on the product labels, see the above front and rear product views for further details. Note that the MMF version is shown.
2. Install the SFP module, see below diagrams showing step by step instructions.
3. Verify that the distance between the 3G-SDI Transmitter and Receiver is within MuxLab specifications (see Specifications table for further details).
4. To install the Transmitter:
 - a) Connect the Transmitter to the SDI video source with a COAX cable (Belden 1694A recommended).
 - b) If the application is point-to-point, then connect one (1) length of Cat 6a/7 grade UTP cable to the 10Gig port on the Transmitter. If transmitting over the network, use a 10 Gig Ethernet Switch between the TX & RX units.
5. To install the Receiver:
 - a) Connect the Receiver to the SDI display equipment with a COAX cable (Belden 1694A recommended).
 - b) If the application is point-to-point, then connect one (1) Cat 6a/7 cable coming from the

Transmitter, to the 10Gig port on the Receiver. If transmitting over the network, use a 10Gig Ethernet Switch between the TX & RX units.

6. If the configuration is a point-to-multipoint or multipoint-to-multipoint:
 - a) You will need to use an Ethernet Switch with Gigabit ports and DHCP Server support. In addition IGMP Protocol support is required for the multipoint-to-multipoint case. **Verify that the Ethernet Switch is configured correctly and that the DHCP Server is enabled and that the IGMP Protocol is enabled for multipoint-to-multipoint applications.**
 - b) Connect all Transmitters and Receivers to the Ethernet Switch.
7. Connect the 12 VDC power supply to each Receiver and to an AC power outlet. Next connect each Transmitter in the same manner. If power is present, the green power LED on each Transmitter and Receiver will illuminate.

Note: Power 'ON' the 3G-SDI / ST2110 over IP uncompressed gateway converter only after all data connections have been made.

8. Power 'ON' the 3G-SDI equipment and verify the image quality.
9. The 500767 provides a 1GB Ethernet port to connect additional network devices (e.g. RestAPI control software).
10. This product supports RS232 for remote control on end devices.
11. The following diagram illustrates a typical point-to-multipoint LAN configuration.



Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in regard to the installation of the 3G-SDI/ST2110 over IP Uncompressed Gateway:

Symptom	Transmitter LEDs			Receiver LEDs			Probable Cause	Possible Solutions
	Power	SDI	SFP	Power	SDI	SFP		
No image	OFF	OFF	OFF	OFF	OFF	OFF	No power	<ul style="list-style-type: none"> • Check power connections
No image	ON	OFF	OFF	ON	OFF	OFF	Wrong Configuration	<ul style="list-style-type: none"> • Verify TX/RX settings
No image	ON	OFF	OFF	ON	OFF	OFF	Ethernet Switch	<ul style="list-style-type: none"> • For multipoint-to-multipoint enable the IGMP mode of the Ethernet Switch.
No image	ON	ON	ON	ON	OFF	ON	3G-SDI Cable	<ul style="list-style-type: none"> • Check the 3G-SDI cable quality.
No image	ON	OFF	ON	ON	OFF	ON	3G-SDI invalid source	<ul style="list-style-type: none"> • Check the 3G-SDI video source.
No Audio	ON	ON	ON	ON	ON	ON	Misconfiguration	<ul style="list-style-type: none"> • Check the audio settings on TX/RX

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).

SFP Module Installation



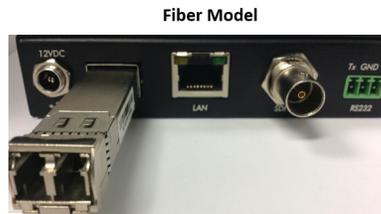
1. Identify SFP socket



2. Position the SFP Module in front of the SFP socket



3. Insert the SFP into the slot and ensure is seated properly



2. Position the SFP Module in front of the SFP socket



3. Insert the SFP into the slot and ensure is seated properly



2321 Cohen Street, Montreal, 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