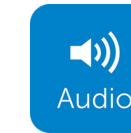
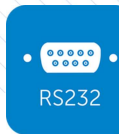
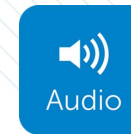


HDMI2.0/ST2110 over IP Gateway Transceiver

500794-2110



Overview

The transceiver unit allows HDMI2.0 equipment to be extended up-to many miles over an IP network. This Gateway Converter supports the ST-2110 AV over IP protocol standard for Broadcast applications. It supports audiovisual data up to **uncompressed 4K@60Hz** resolution video and 16 audio channels (12Gbps bandwidth).

This unit is a transceiver and can be configured as a Transmitter or Receiver for added flexibility and convenience.

The unit converts AV data from HDMI2.0 to be utilized in a broadcast environment over a network, while extending end point source and sink devices at up to 6.2mi (10km) via duplex single mode fiber, and up to 320ft(100m) for the multimode model. Point-to-point configuration is supported as well as point-to-multipoint and multipoint-to-multipoint configurations by connecting several units to a 25G Ethernet network. This device is versatile and can also be used over 10G network. In this case, maximum video resolution is uncompressed 4K@30Hz (6Gbps bandwidth).

The device supports ST-2022-7 (Class D) Redundancy for critical fail-safe applications allowing the audio/video signal to run over two independent 25G/10G Ethernet Networks. The unit provides a 1G Ethernet Network port for control via Web interface or 3rd party management platforms supporting a RestAPI, or NMOS (IS-04 for discovery and IS-05 for connectivity management).

Applications

- Commercial broadcast AV systems
- News/sports/TV stations
- Movie networks

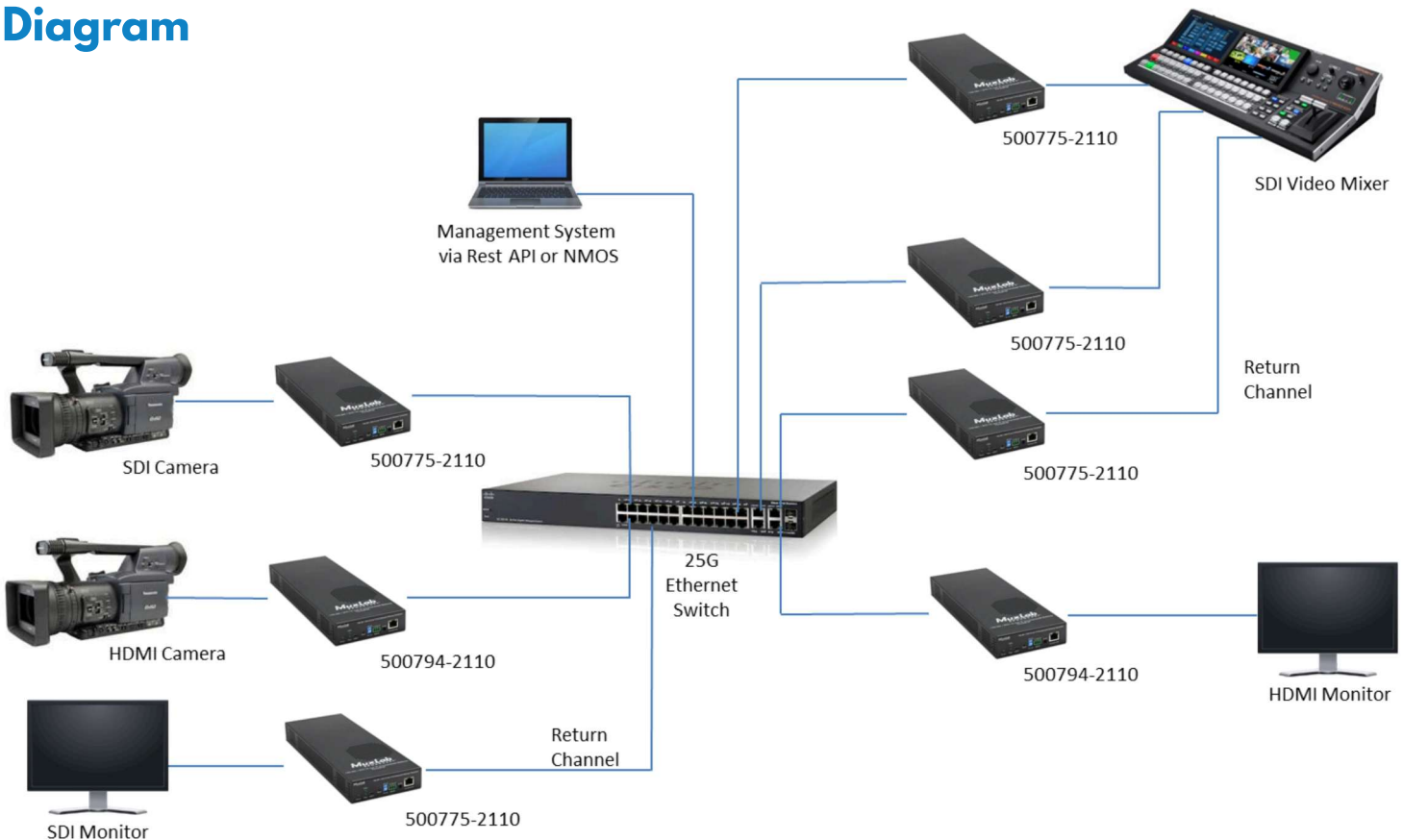
Specification

Environment	HDMI2.0
Devices	Cameras, mixers, media players, monitors, TVs, PCs, laptops, servers supporting up to HDMI2.0
Signals	<ul style="list-style-type: none"> · Up to 4K @ 60Hz, supporting ST-2110, in 25G network environment · Up to 4K @ 30Hz, supporting ST-2110, in 10G network environment
Connectors	<ul style="list-style-type: none"> (2) HDMI connectors (2) SFP Cages for 25G/10G Ethernet ports for redundant AV transmission (1) RJ45S Connector for 1G Ethernet port for control (1) 2.1mm locking power connector (1) Dip Switch for choosing device functionality Tx or Rx (1) Dip Switch for choosing Media Network 25G or 10G (1) USB-C Connector (for future use) (1) 3-position Phoenix Connector for RS232 (for future use) (1) 3.5mm audio connector (for future use)
Cable (not included)	<ul style="list-style-type: none"> (2) Dual MM fiber cables (when using Multimode SFPs) Or (2) Dual SM fiber cables (when using Single mode SFPs)
SFP (not included)	<ul style="list-style-type: none"> (2) MuxLab SFPs 25Gbps Or (2) MuxLab SFPs 10Gbps
Max Distance	<ul style="list-style-type: none"> 330ft (100m), when using MM SFP 6.2mi (10km), when using SM10 SFP 25mi (40km), when using SM40 SFP
Latency	Zero latency
Compression	None (uncompressed)
Network bandwidth	<ul style="list-style-type: none"> Up to 12 Gbps over 25G network Up to 6 Gbps over 10G network
Network requirement	<ul style="list-style-type: none"> 25G or 10G Ethernet LAN for AV transmission 1G LAN for User Web Interface and 3rd party management platforms
3rd Party Control	Via RestAPI and NMOS (IS-04 for discovery & IS-05 for connectivity management)
Power Supply	12V/3A
Power Consumption	30 Watt
Temperature	<ul style="list-style-type: none"> Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Aluminum
Dimensions	4.4" x 12" x 1.3" (11.1 x 30.5 x 3.3 cm)
Weight	1.4 lbs (0.65 kg)
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0
Warranty	2 years
Order information	500794-2110 HDMI2.0/ST2110 over IP Uncompressed Gateway Converter (UPC: 627699007945)
Accessories (Sold separately)	<ul style="list-style-type: none"> · 500920 16-Port Rackmount Transceiver Chassis · 500917 Wall Mount Transceiver Bracket Kit For Media/Data Ports: <ul style="list-style-type: none"> · 500971-25G-MM SFP Module, 25G and 10G, Multimode, 100m · 500971-25G-SM10 SFP Module, 25G and 10G, Single mode, 10Km · 500970-MM SFP Module, 10G, Multimode, 300m · 500970-UTP SFP Module, 10G, UTP, 30m · 500970-SM10 SFP Module, 10G, Single mode, 10Km · 500970-SM40 SFP Module, 10G, Single mode, 40Km · 500970-SM80 SFP Module, 10G, Single mode, 80Km

Key Features

- Supports SMPTE ST-2110 uncompressed video up to 4K@ 60Hz
- Supports SMPTE ST-2022-7 (Class D, supporting up to 150usec delay with no frame lose) AV signal Redundancy (Seamless Protection Switching)
- Extend HDMI audio/video over an IP network up to 6.2 miles (10km).
- This device is a Transceiver and can be configured as a Transmitter (Encoder), or Receiver (Decoder)
- This device can be used over 25Gbps Network or 10Gbps Network.
- Supports many Transmitters and Receivers depending on network bandwidth
- Supports point-to-point, point-to-multipoint and multipoint-to-multipoint applications
- Supports two (2) 25G or 10G Ethernet ports (labelled as: Media 1 & Media 2) for AV Media/Data transmission, and a 1G Ethernet port (labelled as: Console LAN) for device management & control
- RS232 port is included for future use, to manage end devices
- USB-C port is included for future use, to implement KVM management
- Audio 3.5mm port is included for future use, for audio insert/extract
- May be managed via a Web interface and third-party control software platforms supporting a RestAPI or NMOS based management platform

Diagram



HDMI2.0/ST2110 over IP Gateway Transceiver
500794-2110

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