



SeaChange® ≡ MediaClient™ 4201

Single Channel HD/SD Simulcast Decoder

DESCRIPTION

The SeaChange® MediaClient™ 4201 is a Single Channel HD/SD Simulcast Decoder for broadcast playout systems with very powerful up & down conversion capabilities. From a single encoded SD or HD video file, it will produce both HD and SD video outputs. The capabilities of the MediaClient 4201 allow HD channels to replace or coexist with SD channels and allows SD or HD content to be used in either or both formats. A summary of the simulcast capability of the mcl-4201 is shown in Table 1 on reverse side.

The MediaClient 4201 supports MPEG-2, IMX and DV25/50 Standard Definition coding in MXF or as MPEG-2 Program Streams or Transport Streams up to a maximum video bit rate of 50Mb/s. High Definition MPEG-2 4:2:0 and 4:2:2 Profile is supported up to 80Mb/s with BMLex or 50Mb/s with BML as an MPEG-2 Program and, Transport Stream or MXF OP1A. HD and SD output signals comply with SMPTE-292M and SMPTE-259M, respectively, and each supports 8 embedded stereo audio pairs, with compressed or uncompressed VBI lines and support for coded VITC/CC/Teletext.

The HD/SD output pair is equipped with a single RS-422 automation control port to permit control via broadcast automation systems or jog/shuttle boxes. Each MediaClient 4201 is equipped with two Gigabit Ethernet ports, permitting synchronous video packet traffic to be isolated from the asynchronous control and configuration traffic.

The mcl-4201 is housed in a 1RU rack-mount enclosure. The combination of HD/SD capability in a 1RU form factor make the mcl-4201 the ideal solution for broadcasters transitioning their current SD MediaClient/MediaLibrary solution to High Definition and maintaining usage of their SD library of content.



The MediaClient 4201 is one model of the new series of HD ready SeaChange MediaClients. It connects ideally with the rock solid SeaChangeMediaLibrary to form the most scalable and innovative Playout server available today. The resulting solutions provide IT-like simplicity and cost, and offer unmatched fault tolerance.

KEY FEATURES

- Automatic up / down conversion
- Supports MPEG-2, IMX and DV encoding and decoding
- Native MXF capabilities
- Compatible with SeaChange BMC media files
- Space-saving 1RU rackmount chassis
- Standard, hot-swappable redundant power supply benefits
- Plays back to back SDI and HD-SDI from any MPEG-2, IMX and DV
- No transcoding or multiple dedicated decoders and complex automation control
- Reliable and high throughput over IP connectivity to SeaChange MediaLibrary storage

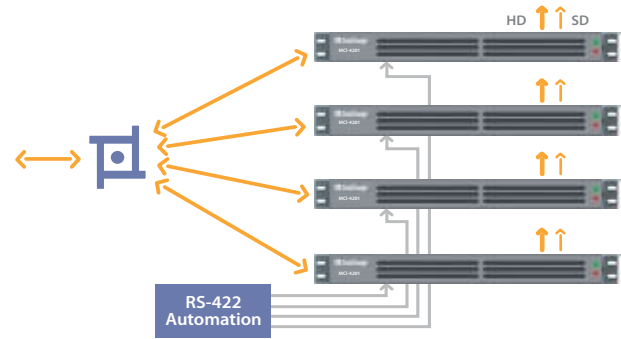
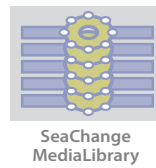
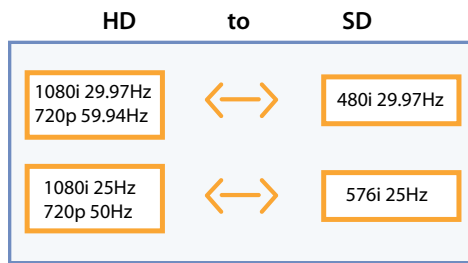


Table 1: Standard Definition/High Definition Scaling

DECODER FEATURES

- SD: MPEG-2 4:2:0/4:2:2 Profiles up to 50Mb/s, or SD IMX 30Mb/s, 40Mb/s, 50Mb/s, or
- SD: DV-25/50
- HD: MPEG-2 4:2:0 /4:2:2 Profile up to 80 Mb/s*
- SD and HD: Support for MXF(OP1A), MPEG-2 Program and Transport Streams
- Multiple aspect ratio adjustments available for the HD and SD decoder
- Audio support of up to 8 AES pairs uncompressed per SMPTE 302M and SMPTE 331M (for MXF only), up to 4 AES pairs compressed, eight pairs mixed compressed/uncompressed. Support Dolby E or AC-3 pass-through
- Support for compressed, uncompressed and encoded VBI modes
- Support modulation and output of close captions for HD as per EIA-708 and for SD as per EIA-608
- TC and control code support as per SMPTE RP-188

OPERATIONAL CAPABILITIES

- Simultaneous decode and playout of SD and HD video
- Back-to-back play of many audio/video compression and stream types
- VTR-like Jog/Shuttle support
- Control via VDCP or BVW-75 protocols

CHASSIS SPECIFICATIONS

Size 1RU rackmount, 1.7”H x 16.8”W x 22.6”D (43mm x 246mm x 574mm)

Weight Approximately 35 lbs (15.9kg)

Environmental Conditions

Operating temperature: +10 C to +35 C (50 to 95 F)

Non-operating temperature: -40 C to +70 C (-40 to 150 F)

Relative non-operating humidity: 95% at +30 C, non condensing

*up to 50Mb/s video with BMLe series and 80Mb/s video with BMLex series

ORDERING INFORMATION

Sales Order Number	Description
MCL-4201	Single Channel HD/SD Simulcast Decoder for use with SeaChange MediaLibrary
PWR-0078-00	Spare Power Supply Set for SeaChange MediaClient 4012
PWR-0078-NR	Credit option to remove the second power supply

Power Requirements

100-240 VAC, 50/60Hz
Option for single power supply

I/O SPECIFICATIONS

- SMPTE-292M (1.485Gb/s) HD serial digital output (1)
- SMPTE-259M (270Mb/s) SD serial digital output (1)
- SMPTE-272M embedded audio (8 pairs) per video
- Analog SD (Blackburst) or HD (Tri-level sync) Genlock inputs
- VITC via SDI
- RS-422 serial port (1)
- Dual Gigabit Ethernet ports (2)

HARDWARE SPECIFICATIONS

- CPU Dual Intel Dual Core Xeon 5160, 3.0GHz with 1333MHz FSB with 4MB cache

Memory 4GB, Registered, ECC
Internal Hard Disk One 60GB SATA Drive
Removable Media CD-ROM