



≡ SeaChange® MediaClient™ 4102

High Definition Dual Output Decoder

The SeaChange® MediaClient™ 4102 is a dual-channel High Definition Decoder for 59.94Hz and 50Hz ideal for multi channels HDTV payout systems. Capable of video bit rates up to 80Mb/s, this product plays out 2 independent video channel of MPEG-2 video encoding multiplexed as MPEG-2 Program, Transport Streams or MXF OP1A. The two HD-SDI Outputs are SMPTE 292M compliant and handles up to eight embedded audio channels (16 audio tracks.)

The MediaClient 4102 HD Decoder is capable of frame accurately playing back to back any MPEG2 profiles such as MP:HL or 422P:HL under control from best of breed broadcast automation systems. Jog & Shuttle control is also available for content review prior to transmission.

VBI capabilities include support of 16/32 lines compressed or up to 6 uncompressed VBI lines, and encoded closed captions (per EIA-708), VITC (per SMPTE 12M) and Teletext (per ETSI EN 300 472).

In addition to the embedded AES pairs, the MediaClient 4102 also passes through Dolby-E and AC-3 audio in any of the 8 embedded pairs.

The MediaClient 4102 is housed in a 1RU rack-mount chassis with redundant power supplies. The MediaClient 4102 is the most cost effective HD payout solution available today with the lowest cost per channel. It is best suited for multi-channel High Definition by Terrestrial Broadcasters, Satellite operators and Program Providers.

The SeaChange MediaClient 4102 is one model of the extensive HD/SD SeaChange MediaClient product range. It connects to the SeaChange MediaLibrary storage to form the most scalable, truly IT centric HD and SD payout transmission server available today. The resulting solutions provide IT-like simplicity and cost, and offer unmatched fault tolerance.



FEATURES

- Supports MPEG-2 Main Profile @ high level and 422 Profile @ high level decoding formats
- Frame-accurate decoding of MPEG2 and MXF files
- CBR decoding modes
- Space-saving 1RU rack-mount chassis
- Standard redundant power supply

BENEFITS

- Complies with major HD formats and profiles
- Streamlines HD content workflow with MXF
- Immediate upgrade path for existing SeaChange MediaLibrary/MediaClient Systems to High Definition
- On-air operations protected from supply or mains failures

FUNCTIONAL SPECIFICATIONS

Video Standards	1080i/59.94Hz, 1080i/50Hz, 720p/59.94 and 720p/50Hz*
Video Quantization	Up to 11 bit
Video Codecs	MPEG-2 4:2:0 Profile, up to 80** Mb/s, per ISO/IEC 13818-2 MPEG-2 4:2:2 Profile, up to 80**Mb/s, per ISO/IEC 13818-2
Audio Sampling Frequency	48 KHz
Audio Quantization	16bit, 20bit or 24bit
Audio Codecs	Up to Eight AES Channels (16 tracks) Uncompressed, per SMPTE 302M and SMPTE 331 (MXF only) Up to four AES channels (8 tracks) compressed per ISO/IEC 13818-3 Up to eight mixed compressed and uncompressed AES channels
Vertical Blanking Interval	Up to 6 Lines Uncompressed per Video Frame 16 or 32 lines compressed per video frame Close Caption per EIA-708 (VANC) Timecode per SMPTE RP-188 (HANC)
Stream Multiplexes	MPEG-2 Program and Transport Stream MXF OP1A as per SMPTE 378M
Control Protocols	VDCP BVW-75
Network Protocols	CIFS (Common Internet File System)

OPERATIONAL CAPABILITIES

Play	Frame-accurate back to back play of all supported compression standard and stream types from Control Port
Jog/Shuttle	-128x to +128x, supports scrub audio

ORDERING INFORMATION

Sales Order Number	Description
mcl-4102	Frame Accurate High Definition Video Dual Decoder with dual, redundant, hot-swappable power supplies, 1RU chassis, for use with SeaChange MediaLibrary
PWR-0078-00	Spare power supply set for MCL-4102

* available soon

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

I/O SPECIFICATIONS

Video Output	Two HD-SDI per SMPTE 292M, 75 Ohm BNC Connector
Audio Output	Up to Eight Embedded AES Channels (16 tracks) per SMPTE 272M
Time Code Output	VITC /LTC via HD-SDI Output per SMPTE RP-188
Control	RS-422 Serial Port per video output port 9-pin Female "D" Connectors
Reference	Analog Black Burst or HD Tri-level Sync, 75 ohm BNC Loop-thru connectors
Network	Dual 1000baseT Ethernet, RJ45 Connectors

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

CHASSIS SPECIFICATIONS

Size	1RU rackmount, 1.7"H x 16.8"W x 22.6" D (43mm x246mm x 574mm)
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