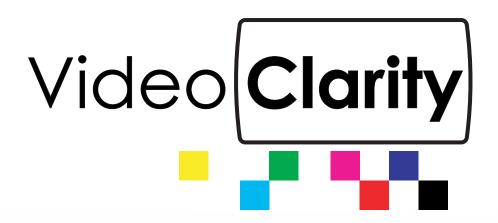
ClearView Player

4K Recorder/Players with Venue Player







Tools for Video Analysis



ClearView Player with Venue Player

A professional, highly reliable recorder-player with multi-format output capabilities. The ClearView Player with Venue Player is ideal when uncompressed video sources are needed for highest quality synchronized digital video playback in a venue or lab environment.

The ClearView Player with Venue Player provides uncompressed recording, file importing, and playback of up to three 4K outputs on separate monitors or fixed side-by-side comparisons may be applied up to the output capacity of each system configuration.

Applications:

- Encoder/decoder subjective testing
- Lab facility uncompressed A/V player/server
- Long-haul network test source
- Multiple output subjective video quality analysis
- Highest quality multi-screen venue playback
- Display calibration and signal path integrity checking
- Dolby Vision® format playback and reference versus additionally processed version comparisons

The ClearView Player includes several uncompressed test sequences and also allows for easy recording of additional video sequences. A new sequence can be input and automatically decoded from IP stream, imported from compressed or uncompressed media file formats shown on the right, or it can be recorded from serial digital inputs. Each sequence may be trimmed with in and out points set. Using the play list feature, any test sequence can be grouped with other test sequences and played in a defined order.

The audio or vertical ancillary data (VANC) record and playback can be optionally turned on or off to allow complete video sequence structural freedom.

The ClearView Player with Venue Player comes in two configurations applying certain levels of functionality:

- A 4K portable and rack mountable 2RU system with the ability to record or play up to 4096X2160p/60Hz and play up to four files of up to 1080p/60Hz each using the included Venue Player application.
- A 4K high capacity 3RU system with the ability to record and then play up to three 4096X2160p/60Hz video sequences on included 12G-SDI or via three HDMI 2.0 outputs with optional interfaces applied. Play 4K video and multiple HD formats via 12G-SDI at integer related frame rates with Venue Player.

ClearView Importer

File Formats Supported (partial list)

Accom YUV CCIR 601 8-bit

ARI Raw Bayer Pattern

Avid AVR, DS HD/SD, DV (*.gen), DNxHD

Avid Meridian, Y'CbCr, OMFI (*.omf, *.omfi)

AV1, AVC, AVC-HD, AVR, AVS

Cineon (*.cin), CineWave

DPX RGB 8, RGB 10, Y'CbCr 4:2:2

DV (*.dv, *.dif), Digital Negative (*.dng)

DVS Direct File Format (*.dvs)

DVSD, DV25, DV50, MPEG-I, mJPEG, DigiSuite

GXF Format/SMPTE-360 (*.gxf)

H.261, H.263, H.264, H.265, HDV

Headerless/Raw (*.hdr, *.yuv, *.rgb, *.raw)

HiCon SLB32 RFB format (*.slb)

Image (*.gif, *.jpg, *.png), Jaleo (*.js), JFIF, JPED

JPEG, JPEG2000, LXF, Meridian, Media 100 MJPEG

Microsoft AVI (*.avi), BMP, DIB Files (*.dps)

MJPEG, MPEG 1 4:2:0 (*.mpg, *.mpeg)

MPEG-2 Elem. Stream, (4:2:0/4:2:2), MPEG2 (*.m2v)

MPEG-2 Program Stream, (4:2:0/4:2:2)

MPEG-2/4 in Transport Stream, (4:2:0/4:2:2)

MPEG-2/4 in MPTS (4:2:0, 4:2:2), MPEG-4 (*.m4v)

MPEG-4 AVC Elementary Stream 4:2:0/4:2:2, (*.h264)

MPEG-H HEVC/H.265 4:2:0 Main Profile (*.h265)

MXF Format (DCP, DV, DVCPro50, MPEG, IMX, OP1a)

Newtek Video Toaster (*.rtv)

Phantom Support (*.cine), PhotoShop FilmStrip (*.flm)

Photo CD PCD, Photoshop PSD, Portable anymap PNM

Portable Bitmap Format PBM DPS

Portable graymap PGM

Portable pixmap PPM

QuickTime Movies (*.mov)

QuickTime formats w/proper codec, ProRes, etc...

RealVideo (*.ra, *.rm, *.ram), Red Camera Stream (*.r3d)

Run-Length encoding (rle)

Sony XDCam, SGI Movie Format (*.mv), SGI RGB

Silicon Image Bayer (*.siv), Sun Raster (*.ras)

Targa TGA, ICB, VDA, VST, Targa 3000, TIFF, TIF

v210 Y'CbCr 10 Bit, VC-1 Pro, VP8, VP9, Viewstore (*.vsr)

vcap, vcap10, Windows Media (*.asf, *.wmf, *.wmv)

Y'CbCr 8/10, Y'CbCr, RGB, YCrCb 8/RGBA

Audio Import Formats

Dolby® Digital Plus Professional Decoder (included)

MPEG-2 Layer 1 (*.mp1)

MPEG-2 Layer 3 (*.mp3)

Waveform Audio (*.wav)

Adaptive Multi-rate (*.amr)

Audio Interchange File Format (*.aiff)

Windows Media Audio (*.wma)

Advanced Audio Coding (*.aac)

Exported File Formats

BMP, Headerless/Raw (*.yuv, *.rgb, *.raw), MXF (v210), QuickTime (.mov) with up to 16 audio channels



ClearView Player with Venue Player - User Interfaces

Venue Player GUI



ClearView Player GUI with 12G-SDI and IP Record Function



12G-SDI recording and IP capture/decoding are provided with the ClearView Player application on all systems. For playback, four 12G-SDI interfaces with one HDMI 2.0 output are included. Up to two additional video interface modules with varying capabilities may be applied as listed on page 4.

Control, Ingest, and Play

Applications included:

Venue Player

ClearView Player

ClearView Importer

Command Line Interface

with easy to use play list function

Uncompressed recording with:

- Video (8, 10, or 12 bit)
- Audio (up to 16 channels)
- VANC (all lines record)
- Timecode via 12G-SDI or analog LTC

Record from MPEG IP stream up to Full HD:

 Automatic decode to uncompressed video and audio for playback by either player app

Play sequences with:

- Video (8, 10, or 12 bit)
- Audio (up to 16 channels)
- VANC, and Timecode via SDI or analog LTC
- Dolby Vision® format (option)

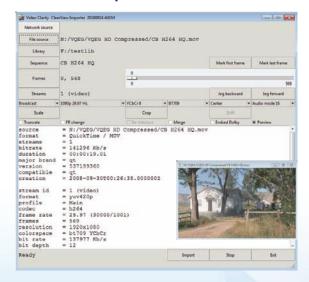
Multiple format playout:

- Mix formats with integer related frame rates
- Lock all sequences to play command

Ingest multiple file types with the included ClearView Importer:

- Uncompressed studio source files
- Compressed media files of all types

ClearView Importer GUI





ClearView Player with Venue Player - Specifications



The Venue Player provides the ability to playback multiple uncompressed resolutions of video with audio at the same time. This allows source video versus differently processed sequence comparisons to be viewed within each resolution.

- Instantly access and compare different distribution formats for quality between resolutions.
- View 4K versus multiple HD resolutions to assess the effects of similar or different bit rates to quality.
- A second or third video interface may be additionally applied from listed options below.
- Compare up to three synchronized 4K HDMI outputs for a test of multiple HDR color types via compatible displays.

High Capacity 4K Player-Recorder - Pictured with One Additional CV-SDI-IO-12G Module Option



Models: CVVP-3085-4K-8 CVVP-3085-4K-16

Includes: One CV-SDI-IO-12G. Venue Player, ClearView Player, CV-Importer, HD-BNC to BNC cables (5), HDMI cable (1), user guide PDF, mouse, keyboard, 3RU rack kit, LTC/AES optional

Storage: 8.0 TB or 16.0 TB Video I/O: Record or play the following SMPTE 259,292,296,424,425a/b, 4K as 2SI 4 12G-SDI - 1 in or 4 out (HD-BNC)

- Up to two 4096X2160p 60Hz 10-bit 4:2:2 play Up to four 1920X1080p 60Hz 10-bit 4:2:2 play

HDMI 2.0: 1 output on HDMI (cable included) Timecode: SMPTE-12M on SDI, or LTC analog

Power: 100 - 240VAC, 47-63Hz. Autodetect, 600 Watts Max

Audio I/O: 24 bit, 48 KHz PCM, or DD+ - 16 ch. embedded audio per video HD-BNC Ref In: 1 HD-BNC input - GPI: serial 9-pin Options: CV-DV-1Ld - Dolby Vision license

CV-WFM - Waveform Monitor / Vectorscope CV-IP-IO-UHD - ST 2110/2022-7 IO module

IP Network and USB Inputs:

1 10G IP, 1G IP, 5 USB 3.1, 1 USB Type C Dimensions: 17" W x 5.25" H x 20.15" D

43.2 cm x 13.5 cm x 51.4 cm

Weight: 31 lbs, 14.1 Kg

Temperature: Operating 0 - +40 celsius Storage -20 - +50 celsius

Rel. Humidity: 5 - 95%, noncondensing

CV-SDI-IO-12G Module Option: Up to two additional interface module options may be applied - Five HD-BNC to BNC cables

and an HDMI cable is provided - LTC/AES cable is optional

Reference Input: 1 HD-BNC, Black (1V), Composite (2 or 4V), or Tri-Level Sync (1V) Digital Video: Two HDMI 2.0 or 1.4, up to two SD, HD, or 4K/UHD simultaneous inputs

HDMI 2.0: 1 output, up to 4096x2160p60Hz 10-bit 4:2:2 on standard HDMI connector

Digital Video: 4 HD-BNC input/output programmable - 12G-SDI, 3G-SDI, or SD-SDI

Supports 8, 10, 12 bits - SMPTE 259, 292, 296, 424, 425a/b, 2082, 4K as 2SI

- HDR Infoframe metadata compatible with HDMI 2.0a/b - CTA-861.3, CTA-861-G

Digital Embedded Audio: 16 channels - SDI embedded input and output

Digital Video Formats: 525i 59.94Hz, 625i 50Hz, 720p 60, 59.94, 50Hz, 1080i 60, 59.94 & 50Hz, 1080p 60, 59.94, 50, 30, 29.97, 25, 24, 23.98Hz, 2160p 60, 59.94, 50, 30, 29.97, 25, 24, 23.98Hz Digital Audio Formats: 24bit, 48KHz PCM, or DD+ Timecode: SMPTE-12M on SDI, or LTC analog

CV-HDMI-I-4 Module Option: Multiple format capture interface with four programmable inputs

-Input image formats up to 30/36-bits/pixel, RGB or YUV, 6 Gbps per color component Digital Audio: 8 channels per program input HDR Metadata: CTA-861.3, CTA-861-G Digital Video Formats: Same as CV-SDI-IO-12G Digital Audio Formats: 16 and 24-bit, embedded HDMI audio, 48 KHz, synchronous per HDMI input

Portable 4K Player-Recorder - For Single 4K or Four Full HD and One HDMI 2.0 Output



Product design and specifications are subject to change without notice or obligation. Dolby and the double-D symbol are trademarks of Dolby Laboratories

Model #: CVVP-2045 Storage: 4.0 TB

Power: 100 - 240VAC, 47-63Hz,

Autodetect, 300 Watts Max

Includes: Venue & ClearView Player,

CV-Importer, HD-BNC to BNC cables (5), HDMI cable (1), user guide PDF, 2RU rack ears, carry case, keyboard, mouse Video I/O: Record or play the following

SMPTE 259,292,296,424,425a/b, 4K as two sample interleaved (2SI)

4 12G-SDI - in or out (HD-BNC)

- In or out up to 4096X2160p 60Hz 10-bit - Up to four 1920X1080p 60Hz 10-bit out HDMI 2.0: 1 output on HDMI (cable incl.)

IP Network & USB Inputs:

2 1000baseT on RJ45, 4 USB 3.0

Dimensions: 8.6" W x 3.5" H x 13.75" D 22.0 cm x 9.0 cm x 35.0 cm

Weight: 11.5 lbs, 5.4 Kg

Temperature: Operating 0 - +40 celsius

Storage -20 - +50 celsius

Rel. Humidity: 5 - 95%, noncondensing

Audio I/O:

24 bit, 48 KHz PCM, or DD+ in and out - 16 ch. embedded audio per video HD-BNC

Timecode: SMPTE-12M on SDI or LTC analog

Ref In: 1 HD-BNC input

Options: CV-DV-1Ld - Dolby Vision distribution, CV-WFM - Waveform Monitor / Vectorscope