ClearView Player
4K Recorder/Players
with Venue Player

Video **Clarity**

Tools for Video Analysis

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 synchronized digital video playback or broadcast product testing.

The ClearView Player with Venue Player provides uncompressed recording, file importing and playback of up to two 4K outputs or both on one screen as a fixed side-by-side comparison.

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

The ClearView Player includes several uncompressed test sequences and also allows for easy recording of additional video sequences. A new sequence can either be input and automatically decoded from IP stream, imported from any of the file import 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 VANC record and playback can be optionally turned on or off to allow complete sequence structural freedom.

The ClearView Player with Venue Player comes in two models with two storage options each:
- A 4K portable and rack mountable 2RU system with the ability to record or play up to 4096X2160 at 60Hz and play up to four files of up to 1080p/60Hz each using the included Venue Player application.
- A 4K 3RU high capacity system with the ability to record one or play two video sequences up to 4096X2160 at 60Hz on two independent 12G-SDI and HDMI outputs. Mix a 4K output with multiple HD formats on four 12G-SDI outputs at integer related frame rates with the included Venue Player.
- Models listed are upgradable to the full ClearView Analyzer.

ClearView Importer

Imported File Formats (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)
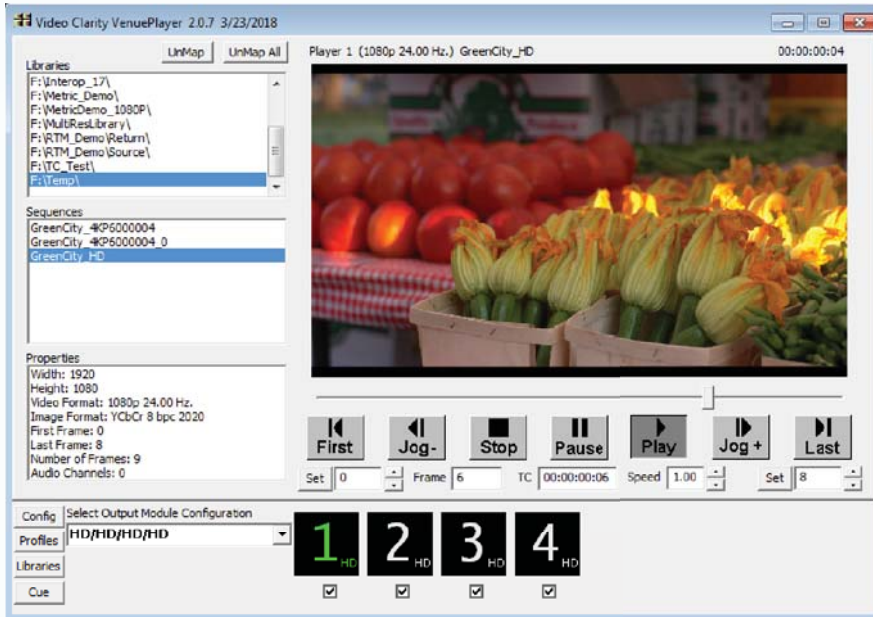Y'CbCr 8/10, Y'CbCr, RGB, YCrCb 8/RGBA

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)
Microsoft AVI (*.avi), MXF (v210)
QuickTime with up to 16 audio channels

Venue Player GUI

ClearView Player GUI with HDSDI and IP Record Function

ClearView Players with Venue Player include 12G-SDI recording and IP capture/decoding using the included ClearView Player application on all CVVP designated systems and models.
-Optionally a second 12G-SDI interface with HDMI 2.0 output may be added for Dolby Vision® metadata playback comparison.

Control, Ingest and Play

Included applications:
Venue Player
ClearView Player-Recorder
ClearView File Importer
Command Line Interface
-with easy to use play list function

Uncompressed recording:
- Video (8, 10 or 12 bit)
- Audio (up to 16 channels)
- VANC (all lines record)
- Timecode record via HDSDI or analog LTC

Record from MPEG IP stream up to HD:
- Automatic decode to uncompressed video and audio for playback by both player apps

Play a sequence with:
- Video (8 ,10, or 12 bit)
- Audio (up to 16 channels)
- VANC and Timecode via SDI or LTC analog
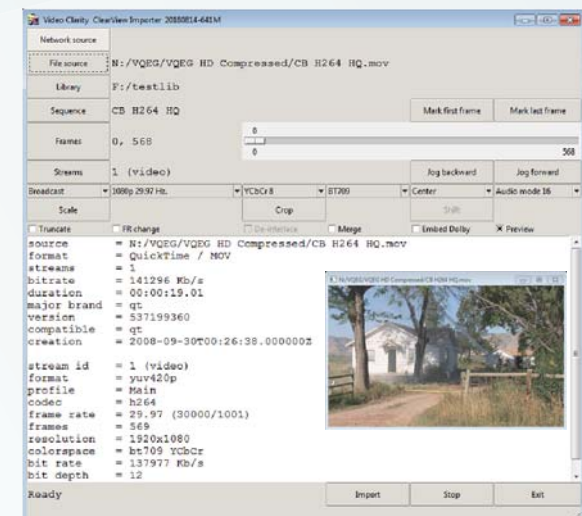- Inserted Dolby Vision® metadata

Multiple format playout:
- Mix formats with integer related frame rates
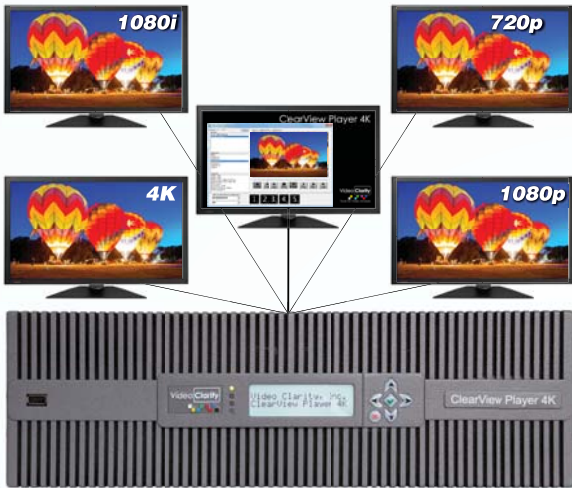- Lock all sequences to play command

Import multiple file types with the included ClearView File Importer:
- Uncompressed studio source files
- Compressed files of all types

ClearView Importer GUI

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 to a choice of monitors.

- Instantly access and compare different distribution formats for quality between resolutions.
- Apply 4K versus multiple HD resolutions to assess the effect of similar or different bit rates to quality.
- A second optional 12G-SDI - HDMI 2.0 interface may be applied for two synchronized 4K HDMI outputs for a test comparison of dynamically inserted metadata for Dolby Vision® using compatible displays.

High Capacity Player 4K Player-Recorder Shown with Optional Additional 12G-SDI and HDMI 2.0

Models: CVVP-3085-4K-8
CVVP-3085-4K-16
Includes:
Venue Player, ClearView Player, CV-Importer, HD-BNC to BNC cables (5), HDMI cable (1), user guide pdf, mouse, keyboard, 3RU rack kit

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 10bit 4:2:2 play
- Up to four 1920X1080p 60Hz 10bit 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+ in and out
- 16 ch. embedded audio per video HD-BNC
Ref In: 1 HD-BNC input - **GPI:** serial 9-pin
Option: CV-WFM - Waveform / Vectorscope
*LTC analog on optional breakout cable only

IP Network and USB Inputs:
1 10G IP, 1 G 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

Additional CV-SDI-IO-12G:
A second 12G-SDI/HDMI 2.0 interface option.
- Five HD-BNC to BNC cables
- HDMI cable
- LTC, AES cable is optional

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
Digital Embedded Audio: 16 channels - SDI embedded input and output
HDMI 2.0: 1 output, up to 4096x2160p60Hz 4:2:2 on standard HDMI connector
- HDR Infoframe metadata compatible with HDMI 2.0a/b - CTA-861.3, CTA-861-G
Reference Input: Black (1V), Composite (2 or 4V), or Tri-Level Sync (1V) via 1 HD-BNC

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 Format: 24bit, 48KHz PCM, or DD+
Timecode: SMPTE-12M on SDI

Portable 4K Player-Recorder for Single 12G-SDI or Four 3G-SDI with HDMI 2.0 Output

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 ears, hard 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 10bit
- 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, LTC analog*
Ref In: 1 HD-BNC input
Options: CV-WFM - Waveform / Vectorscope
*LTC analog on optional breakout cable only