XTV Suite

One for all, all for one

XTV Suite is a professional complete set of software tools for TV Broadcast Automation which manages video capture, trimming, scheduling and playout. Completely automatic and unattended efficiency 24/7.

XTV is perfect for TV stations, Satellite Channels, Cable TV, News Room, Web TV, CCTV, Corporate TV, Presentation, hotel pay TV channels, museums info channels and video wall display, which can take advantage of its user-friendly interface.

XTV Channel In A Box (CIAB) architecture guarantees a linear scalability of your TV Playout facility.
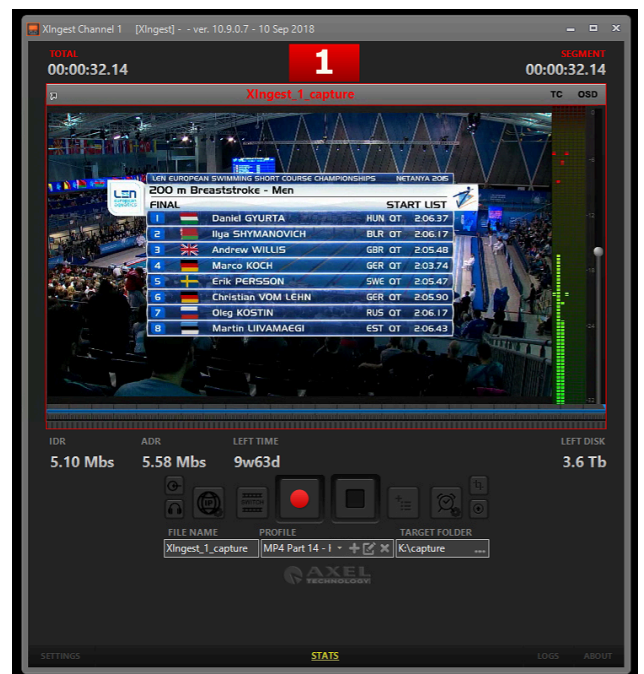
Designed to achieve

a true universal format compatibility

At the same time, multi-channel TV stations and TV networks can enjoy **XTV**'s scalable structure and universal file compatibility. **XTV** is designed to achieve a true 'universal format' compatibility. **XTV** ties together all production departments allowing direct playout of DV, HDV, MPEG-2, MPEG-4, H.264, H.265, QuickTime, AVI, MXF, XDCAM, PRORES, DNXHD, GXF, LXF, etc, in any resolution or framerate with automatic adaption.

Product Technical Specifications

XTV Suite is able to satisfy those customers looking for

second generation CIAB - Channel In A Box, able to provide

traditional playout deployment reliability and

functionalities with the typical CIAB TCO.

Media compatibility and multiformat benefits

XTV plays out any kind of media in any resolution:

DV, HDV, MPEG-2, MPEG-4, MPEG-1, H.264, QuickTime, MXF, XDCAM,

PRORES, DNXHD, GXF, LXF, etc.

XTV allows to play and mix any media format according to broadcaster's

production workflow and pros and cons of each AV codec.

Hardware Compatibility: BlackMagic, AJA, BlueFish

Dynamic Playlist: Real time playlist management

without black frames nor freezes.

Advanced Scheduler: Unlimited playlist length with automatic

clip skipping and cutting when late.

Duration stretching when ahead of time. Sequence loop.

Automatic filler insertion for gap handling.

Log Report: Status and playout logging, with XML

export for easy processing and printing.

No Database: Metadata is saved directly into media file,

allowing file rename,copying and moving.

XTV Suite include

XPlayout > 24/7

Automation

XIngest > real-time

capture from SDI-NDI-IP

Additional software modules

not included in XTV Suite

XMirror > Playlist media

cache copier

XMusic > Automatic

musical playlist creator

Free apps

XTrimmer > Metadata injector and

quality control

XScheduler > Offline playlist

management

CGComposer > CG template creator

XLogsViewer > As run logs viewer

XInfo > Playlist information display

XRouter > Routing switcher sharing on

LAN

XRemote > Remote control or routing

switcher

XEmergency > N+1 playout

redundancy (needs xplayout licence)

XTrimmer   XScheduler   CG Composer   XLogs Viewer   XInfo   XRouter   XRemote   XEmergency
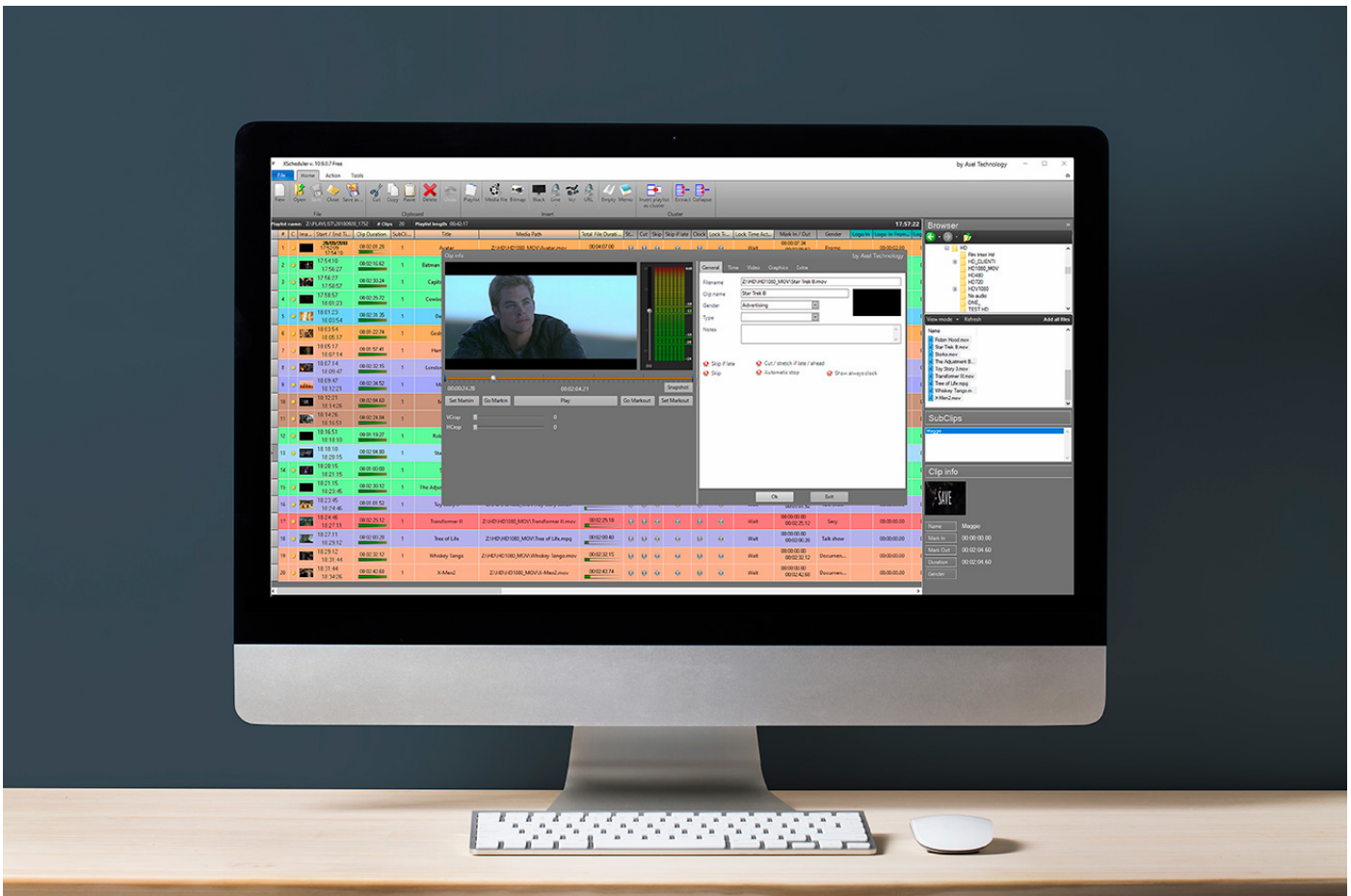
Product Technical Specifications

XTrimmer

XTrimmer is the free app for quality control and metadata insertion. It allows to mark the clips for in and out points, segment the clip for advertisement interruption, but also modify the clip's video and audio parameters to exactly match the desired output. Parameters include aspect ratio correction modes, vertical and horizontal crop to minimize letterbox on air, field dominance inversion, but also precise audio level correction with automatic loudness calculation. XTrimmer allows secondary CG events insertion to air graphics precisely superimposed and timed with the playlist also defining crossfade/wipe effects between clips. Video file is leaved untouched as an original, while all parameters are saved as metadata, invisibly

Product Technical Specifications

piggy-backed to the video file, so you can copy, move and rename the file, as the metadata follows automatically. XTrimmer is a completely free application allowing to be installed on any networked computer and so participating effectively to the automation workflow. XTrimmer can be used with the computer screen and loudspeakers, but also features video outputs on most blackmagic or aja video devices and/or NDI output, allowing quality control in full video resolution, also with CG and graphics. Suggested system requirements are i-7 on Windows 10, decklink mini monitor and 32" HDMI TV.

XScheduler

XScheduler is the free app for offline playlist creation. It allows to

manage and edit playlist simply dragging and dropping video files on the GUI, defining starting dates and times, and allowing to modifiy the clip parameters individually, such as aspect ratio correction modes, vertical and horizontal crop to minimize letterbox on air, field dominance inversion, but also managing secondary events like GPI and character generation and graphics. Clips are highlighted by color matching the clips's gender. Live sources and URLs can be inserted directly in the playlist, and, like Xtrimmer, realtime video preview with graphics is available on the computer screen and also as a video output on most blackmagic or aja video devices and/or NDI output, allowing quality control in full video resolution, also with CG and graphics. **XScheduler** is a completely free application allowing to be installed on any networked computer and so participating effectively to the automation workflow. Suggested system requirements are i-7 on Windows 10, decklink mini monitor and 32" HDMI TV.

Future-proof Cloud & IP workflows

Support of IP I/O such as NDI, SMPTE 2022 & SMPTE 2110 (only with specific video cards) turns XTV Suite to a game changer. Public and Private Cloud deployment is welcome. NDI and IP sources are also supported directly on the playlist, allowing playout of NDI, UDP, RTP, RTSP, RTMP, HTTP streams and setting parameters specifically, such as aspect ratio correction modes, vertical and horizontal crop to minimize letterbox on air, field dominance inversion, etc. An internal IP encoder allows sending playout output via UDP to external multiplexers, or via RTMP,HLS,RTSP,IIS Live smooth, or windows media streaming to cloud servers for media distribution on
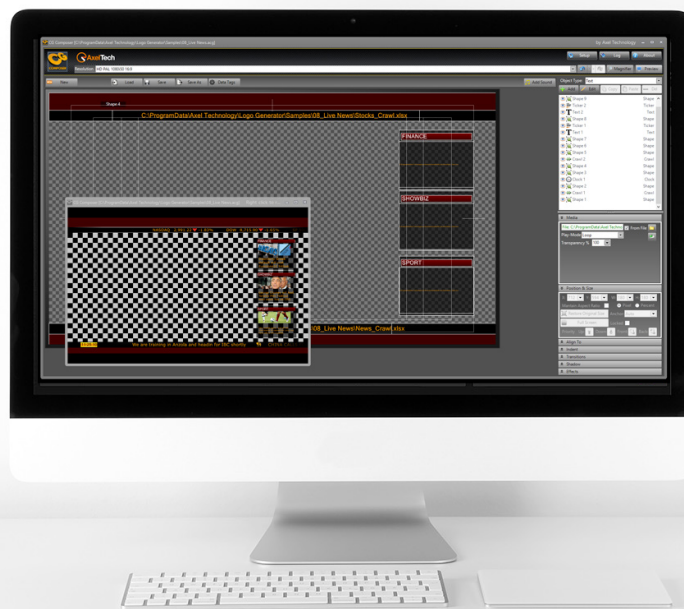
internet. If an Nvidia GTX or better board is installed, GPU accelerated compression allows to use H264 and H265 codecs without affecting the computer's CPU.

Integrated multi layer CG

Advanced graphics can be overlayed on top of the playlist and can be used for simple channel branding or may include complex multi layered objects with tickers, rolls, crawls, time, countup/down and slideshows. The free app CG composer allows creation of graphics templates to be aired manually or associated as secondary events in the playlist for automatic workflows. CGcomposer allows importing of any bitmap file format, sequence of bitmaps or video file, and manages alpha channel for perfect transparencies. TGA or PNG sequences, animated GIF, Quicktime Anim Tend Prores 4:4:4:4 are fully supported for animations with alpha channel. Text and file paths for graphics can be specified in

Xtrimmer, Xscheduler or Xplayout for dynamic text workflows like song info animations for music TVs, for example. Data source for text, rolls, crawls and tickers can be imported from TXT files, CSV or XLSX, updating automatically on content changes. Front color, back color, font and alignment are imported from XLSX files allowing rich text format for tickers, rolls and crawls. Animations can be inserted into cells as hyperlinks and aired seamlessly for a really professional look. XLSX formulas, macros and database connectors can be used to create your own custom application for CG management. In Xplayout the CG layer can optionally be output as a separate KEY and FILL SDI signal for external DSK insertion, or a NDI stream with alpha for Video over IP usage.
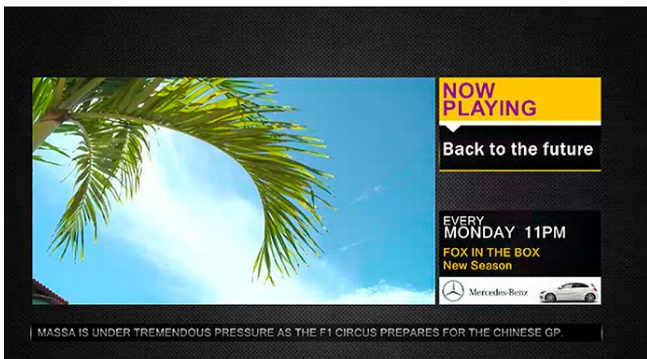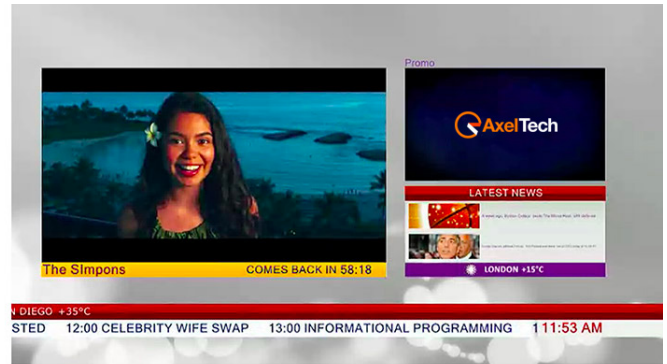

CGComposer
Amazing SqueezeBacks

The built-in 2D DVE and an additional multi-layer CG backround allow smooth squeezbacks on top of customizable animated graphics with tickers, rolls, crawls and time with dynamic text and countdowns for your "Now showing", "Up next" and "Coming back in .." workflows. Video files in any format can also be added to the backround layer as Picture in Picture objects. Squeezebacks can be associated to playlist items, like normal CG pages, and used as secondary events to be aired

automatically following exact timing.

Remote control
of external devices
and LIVE events

Xplayout is a modern IP based - any file format - automation, but also allows traditional remote control of external devices such as Cart machines, VCRs, logo generators and especially GPIs and master controls, video mixers and routing swicthers, such as Blackmagic Atem, Videohub, Newtek Tricaster or any device with RS232/422 control. Live events can be inserted directly on the playlist and TCPIP or serial commands will be automatically sent to the external devices. Alternatively, live sources can be aired in "AV bypass mode" connecting them to capture card inputs of the system. In this case a delay from 3 seconds to several days can be applied to accomplish a time shifter mode, very

handy when managing country time zone differences.

Secure and Reliable
24/7 with redundancy

Xplayout is among the most reliable automation systems on the market, offering a variety of redundancy options:

1+1 Master and Slave workflow is built in the automation. Whatever the master XPlayout does, the slave follows automatically. If a changeover is used, it can send a GPI signal to the slave, transforming it into the master. (**AxelTech** DML can be used as a sw changeover)

DISCOVER DML

N+1 with the free app XEmergency. XEmergency monitors the audio coming from up to 8 Xplayout systems using add-on audio capture cards. Whenever audio levels drop for a specific length of time, XEmergency fires up a local XPlayout, resuming the playlist from the point of interruption and blacklisting the failing system to the routing switcher. Alarm notification is achieved through SMS or email.

Media redundancy is built in the XPlayout, allowing to define a main media path to a networked NAS for example, a backup media path to a secondary NAS, and a preferred media path to a local hard disk copy of the media. Switching from one path to the other is completely automatic, and, in case of main media path failure, resume from backup path is available after just a few frames.

Media redundancy is also achieved with the optional app XMirror,

the media cache sw, which keeps a copy of the media on local hard

disks.

XTV Compact version

Four rack unit machine with simultaneos play and capture on local storage

XTV Server solution

Each machine capture and play directly from a shared server storage

XMirror and XMusic,
the options for XPlayout

XMIrror is a great feature when using a network NAS workflow. **XMirror** copies all files which populate the playlist from the big NAS onto a small local hard disk. Copies are performed slowly (to avoid saturating LAN bandwidth) and constantly (any modification to the playlist will trigger the copy process). Old files are deleted automatically to preserve disk space. If LAN or NAS fails, files will be played automatically from the local disk. If Local hard disk path is specified as a preferred path, media will always be played locally.
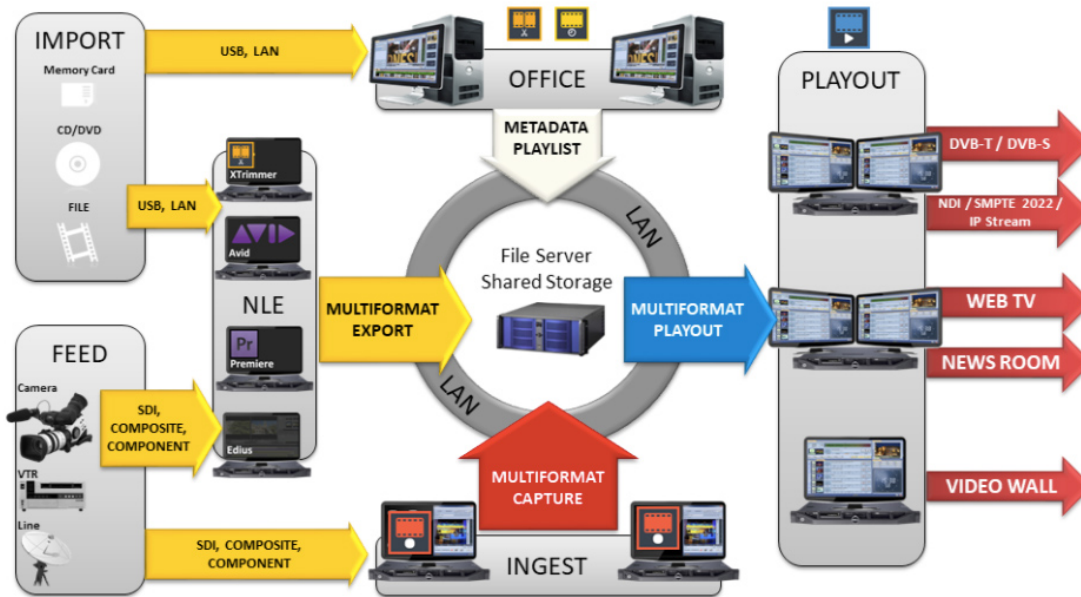
XMusic is the add-on which allows automatic playlist creation following rules that are typical of the radio world. Daily schedule is divided into "clocks" where musical genders can be listed according to the time of day. Then **XMusic** chooses the songs automatically, not repeating same songs and same authors, thus creating confortable and pleasant musical selection. **XMusic** is great for MUSIC TVs, or for channels which need a random, not repetitive, automatic media selection.

XMAM
archive and catalogue
optional

XMAM is **AxelTech** web based media asset management system to organize video and audio files, photos and documents. It integrates seamlessly with XPlayout and XScheduler allowing to Drag & Drop any media directly from the web browser to the playlist.

Product Technical Specifications

XTV Suite workflow

XPlayout

Specifications	GUI
Supported Video Cards: Blackmagic Design DeckLink and Intensity, AJA Corvid, Bluefish	Full screen GUI optimized for 1920x1080 monitor
Resolutions: SD, HD, 2K, 4K (depending on AV card)	Channel Alias
Simultaneous NDI output	Preview framerate adjust for RDP optimization
Simultaneous WebRTC output	CC preview
Preview output on SDI	Drag and Drop of multiple files

Up to 16 Audio channels

Timecode rp188

Virtual device emulation for use as capture device in 3rd party software

Split CG layer on separate SDI or NDI in Key and Fill

SDI or NDI inputs for LIVE sources in AV bypass

Single clip position duration and position display

Total playlist duration and remain display

First frame positioning

Dual graphical or grid style playlist GUI

Drag and Drop to GUI

OSD vu-meters and waveform

Realtime video preview

GUI lock with password

Customer Logo on main screen

Colors according to file gender or status

Features

Virtually any video and file format compatibility

Automatic upscale, downscale, framerate adaptation and aspect ratio correction

CG overlay

Key output on SDI with 32 bits Quicktime Anim, Quicktime ProRes 4:4:4:4, bitmap sequence

As run logs

Log files

VGA compatibility mode for old VGA cards

Separate audio track file management

Emergency file with hotkeys, also with numeric keyboard

Automatic load of last playlist at start-up

Routing switcher remote control : Blackmagic Design ATEM and Videohub, NewTek TriCaster, any RS232 or RS422 routing switcher or master control

VCR automation UVW, VP9xxx or and RS422 SONY

Cart machine control: PROMATIC, DIGICART

Fast CG for emergencies: clock, text and crawl

Product Technical Specifications

Remote control of Blackmagic Design ATEM and NewTek TriCaster

MarkIn and MarkOut management (triggering)

Frame accurate loops REC while PLAY (for specific formats) with endless MarkOut

Realtime Vertical and Horizontal Crop

Realtime field swap: top bottom progressive

Realtime aspect ratio correction mode: Letterbox, no letterbox, stretch

Detailed info on playlist, preview and output status

AGC – Automatic Gain Control

Automatic switch on backup path in case of main path failure

Automatic play from preferred path if same media copy is available

Status file and thumbnail update of main output

Autofill from folder when ahead of time or end of playlist

Automatic load of playlist according to file syntax

Automatic CG according to file gender or user custom types

Remote control of external CG

Integrated master and slave workflow

From 5 seconds to 1 day delay for SDI/NDI sources as time shifting

Subtitle rendering for SRT files

Advanced CG with clocks, tickers, rolls, crawls, bitmap animations, any video file format

2D Squeezeback with advanced backround graphics layer

All CG graphics as secondary events

GPI in/out

Automatic skip/cut if schedule is late

Exact time management in cut/wait for end of current event

CG composing tool for template creation

Non-intrusive sub clip creation for advertisement insertion

Crossfade/effects between files

Traffic scheduling tool

Quality control tool with SDI/NDI output, metedata insertion and loudness control

Automatic media copy tool from NAS to local hard disk (optional)

Automatic music playlist creator (optional)

Xingest

Specifications

Supported Video Cards: Blackmagic Design DeckLink and Intensity, AJA Corvid, Bluefish

Resolutions: SD, HD, 2K, 4K (depending on AV card)

Simultaneous NDI output

Simultaneous WebRTC output

Preview output on SDI

Up to 16 Audio channels

Virtual device emulation for use as capture device in 3rd party software

GUI

Full screen GUI optimized for 1920x1080 monitor

Channel Alias

Preview framerate adjust for RDP optimization

CC preview

Drag and Drop of multiple files

Single clip position duration and position display

Features

Virtually any video and file format compatibility

Automatic upscale, downscale, framerate adaptation and aspect ratio correction

CG overlay

Key output on SDI with 32 bits Quicktime Anim, Quicktime ProRes 4:4:4:4, bitmap sequence

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First frame positioning

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Drag and Drop to GUI

OSD vu-meters and waveform

Realtime video preview

GUI lock with password

Customer Logo on main screen

Video Codecs

MPEG 4 part 2

Cisco OpenH264

Intel Quicksync H264

Nvidia NVEnc H264

Nvidia NVEnc H264 lossless

Nvidia NVEnc H265

MPEG 1

MPEG 2

DV

DVCPRO

MJPEG

FLV Sorenson

HuffYUV

WMV 8

Google VP8

Letterbox, no letterbox, stretch

Detailed info on playlist, preview and output status

AGC – Automatic Gain Control

Automatic switch on backup path in case of main path failure

File format wrappers

Mpeg Program (MPG)

Mpeg Transport (TS)

MPEG4 part 14 (MP4)

QuickTime (MOV)

DNxHD (MOV)

IMX MPEG4

MXF

MXF D-10 (IMX)

GXF

DV

FLV

DVD VOB

ASF

iPod Mp4

AVI

Matroska (MKV)

WebM

Image Sequence (DPX, PNG, JPG)

Apple Prores proxy, LT, 422, HQ

QuickTime ANIM

Uncompressed 422 8-bit

Uncompressed 422 10-bit

DNxHD

VC3

OPEN JPEG2000

DPX

System requirements depend on

Video capture resolution

Video codec format

Number of simultaneous

capture/streaming/proxy

Audio codecs

WAV (16, 24, 32, Cinema, signed, floating

etc)

MP2

MP3

AC3 (ATSC A/52A)

AAC

ALAC

ADCPM

VORBIS

Suggested system requirements

I7 8700K CPU

Windows 10

16GB RAM

NVidia GTX

Minimum system requirements

I3 CPU

Windows 7

4GB RAM

Main Specs

All in one broadcast 4K - 2K - HD - SD playout

Product Technical Specifications

Complete workflow management tools: scheduling, trimming, graphic composer

Multiple codec playout in the same playlist with resolutions and framerates automatic adaption

Multiple formats playout, automatic up/down scaling and aspect ratio adjustment (16/9, 4/3, etc.)

File sharing on LAN architecture

Direct file playout from NLE (no transcoding)

Up to 16 audio channels management

Simultaneous NDI output

Direct streaming output transport stream MPEG2 and H.264 codec, or RTMP.

Automatic management of time during playout (delay/ahead) with filler

Live source full handling inside the playlist control of VTR, Switcher, GPI to Cart Machine

Multichannel and high availability configurations

Hot Key feature for instant videos playout

Graphic overlay: logos, clocks, tickers, animations

High quality sqeezebacks with animated backround

Subtitles in overlay and Closed caption

Clip trimming and Metadata for advertisement intentioned graphic contents

User friendly playlist view with explicative colour scheme

As run and system logs for certification