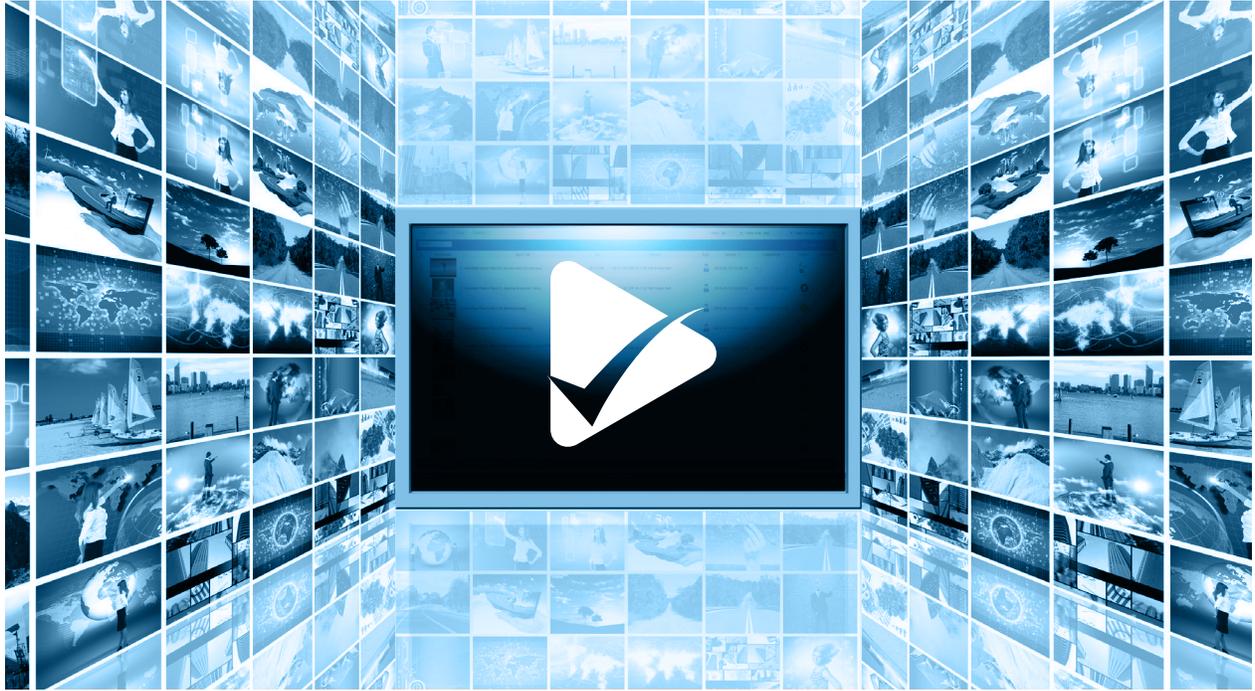


Telestream QC Products

Brochure



Telestream QC Products

Save the costs of rejection and rework with automated QC and correction.

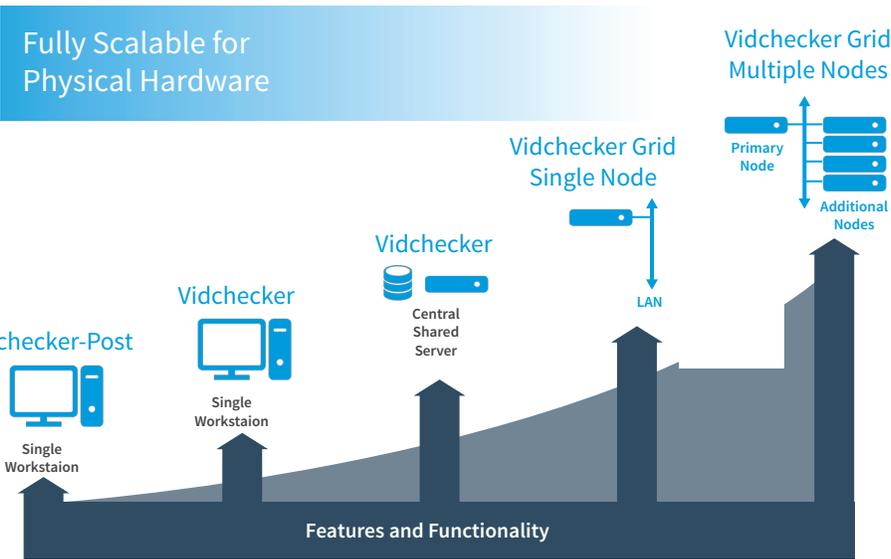
[Vidchecker](#) | [Vidchecker-post](#) | [Vamp](#)

Vidchecker and Vidchecker-post

Vidchecker and Vidchecker-post are easy to install Windows software applications for PCs/servers. They remove the labor intensive tasks of checking conformance manually for video/audio compliance, using waveform monitors and audio loudness meters—and to then manually correct levels with video processing amplifiers, and other tools.

The GUI is accessed through a web browser either on the local machine or remotely over a network. It is designed for checking file-based video before and after distribution, and for use by broadcasters for checking files received from post production and content distributors. These tools help ensure that file, video and audio parameters and levels are correct and ready for broadcast.

Thumbnail	Input File	Size	Template	Type	Started	Completed	Status	Corrected
	\\qaeng-fileshares\source media\MXF\IMX50_5_MXF	514.24 MB	- Video Levels re-encode	Video Levels	2018-10-25 14:03:11	—	29% +1	—
	\\qaeng-fileshares\source media\WARNING! photosensitive epilepsy (pse) sources\London live\Source MXF_LLPPA-test-E9003_b.mxf	1.40 GiB	Photosensitive Epilepsy check	Photosensitive Epilepsy	2018-10-25 13:59:16	—	! +8	!
	\\qaeng-fileshares\source media\WARNING! photosensitive epilepsy (pse) sources\BBC\News_Flash.mpg	43.82 MiB	Photosensitive Epilepsy check	Photosensitive Epilepsy	2018-10-25 13:58:51	2018-10-25 13:59:36	! +3	!
	\\qaeng-fileshares\source media\MXF\IMX50_5_MXF	514.24 MB	- MXF IMX50 Levels	Video Levels	2018-10-25 13:36:53	2018-10-25 13:38:02	! +14	✓
	\\qaeng-fileshares\source media\MXF\DNxHR\FunLogoTest_1080p24_DNxHR_Resolve11.mxf	212.12 MB	Enhanced Syntax Checking	Enhanced Syntax	2018-10-25 13:34:59	2018-10-25 13:38:10	✓	—
	\\qaeng-fileshares\source media\Dropouts\SuiteTest.mxf	4.96 GiB	Digital Dropouts High	Digital Dropouts	2018-10-25 13:27:55	2018-10-25 13:39:04	! +18	—
	\\qaeng-fileshares\source media\Dropouts\Green_blocks new.mxf	1.90 GiB	Digital Dropouts High	Digital Dropouts	2018-10-25 13:25:43	2018-10-25 13:39:44	! +8	—
	\\qaeng-fileshares\source media\Dropouts\ATM\VB103103MXF2080590_TEST_NIET_VERWUJDEREN_part.mxf	14.44 MiB	Digital Dropouts High	Digital Dropouts	2018-10-25 13:25:41	2018-10-25 13:25:51	✓	—
	\\qaeng-fileshares\source media\IMF Related Source Materials\Meridian from Netflix\MERIDIAN_SHR_C_EN-XX_US-NR_51_1_TFR_1_UHD_20160909_OV\ASSETMAP.xml	89.31 GiB	IMF Conformance	IMF Conformance	2018-10-25 12:22:17	2018-10-25 12:59:27	✓	—
	\\qaeng-fileshares\source media\IMF Related Source Materials\FOX UHD HDR IMF Sample Files August 2016\Fox Logo HDR\BIRASHM2020_FTR_1_C_EN-XX_US-NR_51_QHD_20160904_OV\ASSETMAP.xml	7.80 GiB	IMF Conformance	IMF Conformance	2018-10-25 12:21:52	2018-10-25 12:25:46	✓	—



Key Features



Processing

- Fast parallel processing
- Vidchecker uses all available CPU cores



Integration

- Vidchecker is integrated with all of the leading workflow systems
- Easy workflow support – use multiple watch folders with filtering, automatically send reports and move files on pass / fail / correction
- API web services for full integration with production and broadcast workflows and media asset management systems



Results

- Incremental display of tasks in progress
- Live video thumbnails during test
- Detailed alert description and timecodes
- Basic media player included
- Optional Vamp advanced media player enables fast and easy expert review of video, with alert points on the timeline



Reports

- Easy-to-read comprehensive reports
- HTML / XML / PDF
- Configurable with style sheets
- Add user notes and change comments with an audit trail



Checking and Correction

- Thorough checks of file, video and audio parameters and quality, plus legality and correctness
- Checks compliance of files with broadcast delivery standards
- Multiple levels of checking, providing information, warnings, fail-on-error and correct-on-error
- Optional correction features allow automated correction of video levels, audio loudness and peaks—and PSE flash patterns.



Easy to Use

- Simple to install on industry standard PC/servers
- Intuitive web-based GUI
- Simple to use auto-template generator

Vidchecker Advantages

Industry Experts

Because the Vidchecker team is the most experienced in the industry, our award-winning products work the way users expect them to, and have the benefit of patented features not available elsewhere.

Comprehensive Quality Control Tests

Vidchecker products incorporate all the sophisticated tests of file syntax, video structure & quality, audio structure & quality—and metadata—needed for broadcast files. The Vidchecker team actively follows the developments in broadcast standards, providing rapid product updates, including all relevant developments such as 4K, H.265, AS-11, and IMF.

Easy to Set Up, Intuitive to Use

Simple to install on industry standard PC servers, the Vidchecker web-based GUI is exceptionally intuitive. The provision of many standard templates and the easy to use auto-template generator from known good media, ensures that Vidchecker is quick to set up and easy to manage.

Extensive Automated Intelligent Correction

Intelligent correction of video is not merely legalisation of over-limit video, but it also employs a sophisticated patented algorithm that corrects video without affecting visual quality. Likewise, audio levels and loudness, and file and video parameters such as syntax, GOP structure, bit-rates and many more, can all be corrected. No other system provides such an extensive range of correction features.

Return on Investment

The sophistication of the Vidchecker solution reduces the need for manual editing and re-editing. When combined with its ease of installation, competitive pricing, rate of throughput, and intuitive user interface— it means that you get started on auto QC very quickly when using Vidchecker products, achieving an unrivalled return on investment.

Adaptable for Different Workflows

All Vidchecker products have workflow automation tools built in, such as watch folders for integration and email notification. For more sophisticated workflow integration, the freely provided Vidchecker SOAP API is easy to understand and quick to implement, either for end-users or for third-party integration.

Scalable and Flexible

Telestream QC Products are entirely scalable. The Vidchecker-post model is priced and designed to suit the needs of even the smallest post-production company. Vidchecker is geared to larger producers and broadcasters. Vidchecker Grid is where you can take advantage of multiple servers for efficiency and resilience. You can start small and grow the system as your needs change. The only cost is the difference in list price.

Correction Options

Vidchecker products have patented optional auto-correction features that can intelligently and automatically correct many commonly detected errors in your video and audio, and produce a new file encoded in the exact same essence format as the original.

- Video levels and color gamut
- Audio levels, peak and loudness
- Removal/insertion of colour bars and black frames
- Correct SOM timecode
- PSE flashing correction (Ofcom / ITU compliant)

Compliance

Many with Built-in Templates

ATSC, SMPTE, DPP, NABA, CALM, iTunes, EBU R 128, Netflix, UK & Japan PSE Flashing, ARD_ZDF_HDF, DDV2, AS-10 DAP for France, AS-02, AS-03, AS-07, AS-10, AS-11, AS12

Supported Formats

Containers

MXF (All OP's including AS formats), ProRes in MXF (SMPTE RDD 44), DNxHD/DNxHR in MXF (SMPTE ST 2019-4:2009), MPEG-2 TS, MPEG-2 PS, MP4, MOV (inc. ref. files), ASF, AVI, LXF, GXF, Flash, MKV, IMF

Video Codecs

MPEG-2 (XDCAM, IMX, D10), DV/DVCPPro 25/50/100, MPEG-4, AVC/H.264 (all profiles), HEVC/H.265, WMV/VC-1, ProRes (all profiles), ProRes 4444 XQ, DNxHR, DNxHD, MJPEG, JPEG2000, DPX and OpenEXR image sequences, RAW uncompressed YUV / RGB, Huffman, Canopus, Meridien

Audio Codecs

MPEG1/2, PCM, AAC, AES3, LATM, ADPCM, LPCM, WAV, MP3, BWF, WMA, DV, AC-3, Dolby Digital Plus

Closed Captions / Subtitles

CEA-608, CEA-708, SMPTE 436M, Line 21, DVB subtitles, Teletext, support for pass-through of SMPTE ST 436 captions

Intelligent Automated Correction

Patented Video Correction

- Corrects chroma levels if outside limits
- Corrects black level if outside limits
- Corrects RGB gamut if outside limits
- Corrects small video dropouts (e.g. tape hits)
- Insertion / removal / change of length of color bars
- Insertion / removal / change of length of black sequences
- Correction of start timecode
- PSE flashing correction (Ofcom / ITU)
- Video bitrate, frame size, frame rate, aspect ratio

Audio Correction

- Peak levels: peak level correction if TP dB limits exceeded
- Loudness: loudness correction if given LKFS/LUFS exceeded
- Audio levels: correction if PPM level limits exceeded and peak attenuation
- Channel configuration
- Audio bitrate, bit depth, sample rate

Quality Checks

Container Checks

MXF structure, DPP metadata, compare wrapper/essence, number video/audio streams, PIDs, file, bitrate, SPS/PPS, video/audio duration, timecode start/continuity, clean aperture, AFD, MOV Atom (iTunes), IMF validation of metadata & essence.

Video Checks

Video codec/profile, encoding syntax, MBAFF, video bitrate VBR/CBR, frame size, frame rate, video buffer size, frame aspect ratio, pixel aspect ratio, GOP length, GOP structure, field order flagged/baseband, cadence, drop frame, chroma format, luminance, black level, chroma level, RGB gamut, quality/blockiness, analog drops, digital drops, video stripes, corrupt frames, letterboxing/pillarboxing, black frames/sequence, color bars, freeze frames, layout checks, PSE flashing/harmful patterns (Ofcom / ITU), video segment reporting.

Audio Checks

Each track: audio codec, bit depth, sample rate, audio bitrate, number of channels, channel layout, channel mapping, tones, phase coherence between channels, track present during video, min levels, peak levels, clipping, clicks and pops, PPM, DialNorm, integrated/short term/momentary loudness (ITU/EBU/ATSC/CALM/BS-1770), BLITS, GLITS & EBU test tone checks, digital silence. Supports 32-channel audio.

Vamp

The advanced media player *Vamp* is used to play video and audio files on a PC screen or SDI output for QC review. Vidchecker and Vidchecker-post come with their own simple player to view content that has been tested or corrected. However, some environments require a more sophisticated view of the content. Vamp is an ideal tool to guide the user through any alerts raised as part of the automated quality control process. To begin with, Vamp displays the alerts along a timeline representation of the content. The user can then very easily navigate to each alert in turn or randomly jump through scene-by-scene. Navigation is via standard industry transport controls. With the addition of a hardware graphics output card it is possible to take either an HDMI or SDI output from a workstation to a second monitor.

Key Features

- Full media player with the capability to play video and audio on PC / SDI
- Results of auto QC displayed in timeline view with mouse-over to view more detail
- Full display of metadata, e.g. AS-11 MXF / Netflix / iTunes
- Integrated with Vidchecker or Vidchecker-post
- Multiple Vamps can connect to one Vidchecker
- Thumbnail displays of video frames
- Full 'file info' data displayed e.g. file container, video track / codec details, and audio codec / track details for each track
- Integrated audio level meters
- Vamp can be called from within the Vidchecker GUI with media files selected automatically, or run separately
- Vamp is a standard Windows PC application

