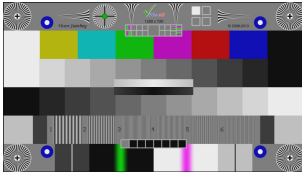




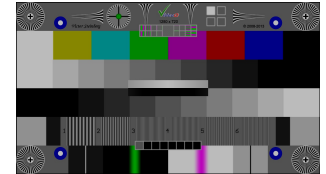
Video Processing Chain Analyzer Software



PASS



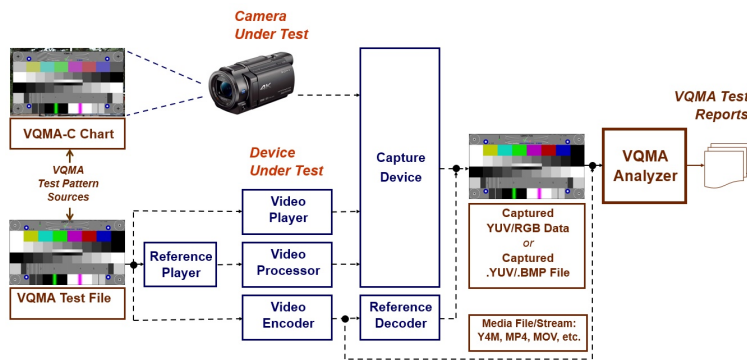
FAIL



Video Analyzer for objective Video Processing Chain Integrity & Performance Validation

- 4th generation of VideoQ best-selling software product used by the renown industry leaders
- Self-contained solution for manual or automated performance measurement of video cameras, video processors, video capture devices and/or complete video system
- Windows GUI Mode and multi-page PDF Report for R&D and product verification
- Command Line Mode and machine-readable Text Report for automated QA/QC operations

Workflow



Analyzed Parameters

- **Geometry:** Scaling, Position, Tilt, Keystone
- **Levels:** Black, White, Color Balance, Gamma
- **H & V Shading** (Levels Spatial Uniformity)
- **Frequency Response:** in dB vs. scalable tvl
- **UV vs. Y Gain** (Color Saturation)
- **K-rating** on needle pulse
- **Comprehensive Noise Analysis**

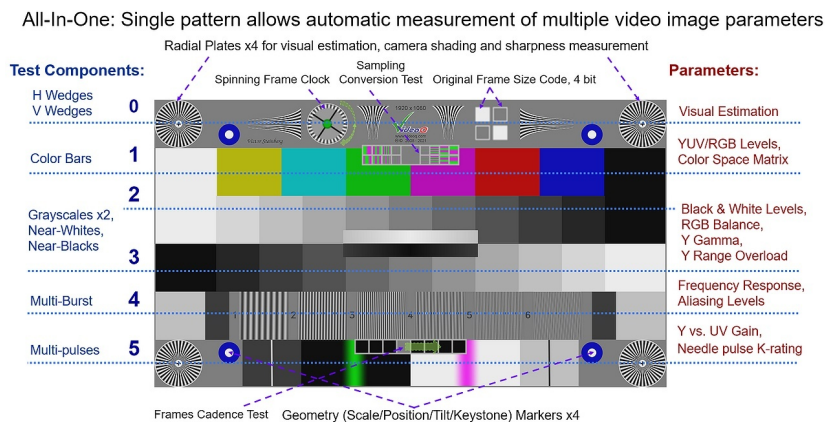
Features

- Video data Pass/Fail performance validation against the target tolerance values contained within customizable VQMA.INI file
- Software executable under Windows™
- USB dongle copy-protected, dongle-per-seat
- Auto-analysis on the companion VQMA Matrix Test Pattern
- Variety of compressed and uncompressed video file formats
- VQMA-C Optical Reflectance Chart to measure video cameras
- Built-in Software Scope: YUV/RGB waveform monitor

Noise Analyzer Features

- **Y SNR:** unfiltered, band-limited and weighted
- **UV, R, G, B** and "**Dark B**" SNR values
- **Y Noise Spectral Density** plots in dB/dF
- **Noise Image**, +24dB boost for better visibility
- **Y, R, G, B Noise Histograms** Display
- **Reference true Gaussian noise** curve overlay
- **0.1 dB accurate SNR** measurement
- SNR Read-out match **industry standard** tools

Single pattern allows automatic measurement of multiple video image parameters



Resolutions supported

Any frame size:
from IPTV 192x108
to UHD 8K 7680x4320



Unique VQMA test pattern layout is equally suitable for SD, IPTV, HD, Ultra HD and Digital Cinema frame sizes, any frame rate, aspect ratio, color space, or interlace ratio

Video File Formats

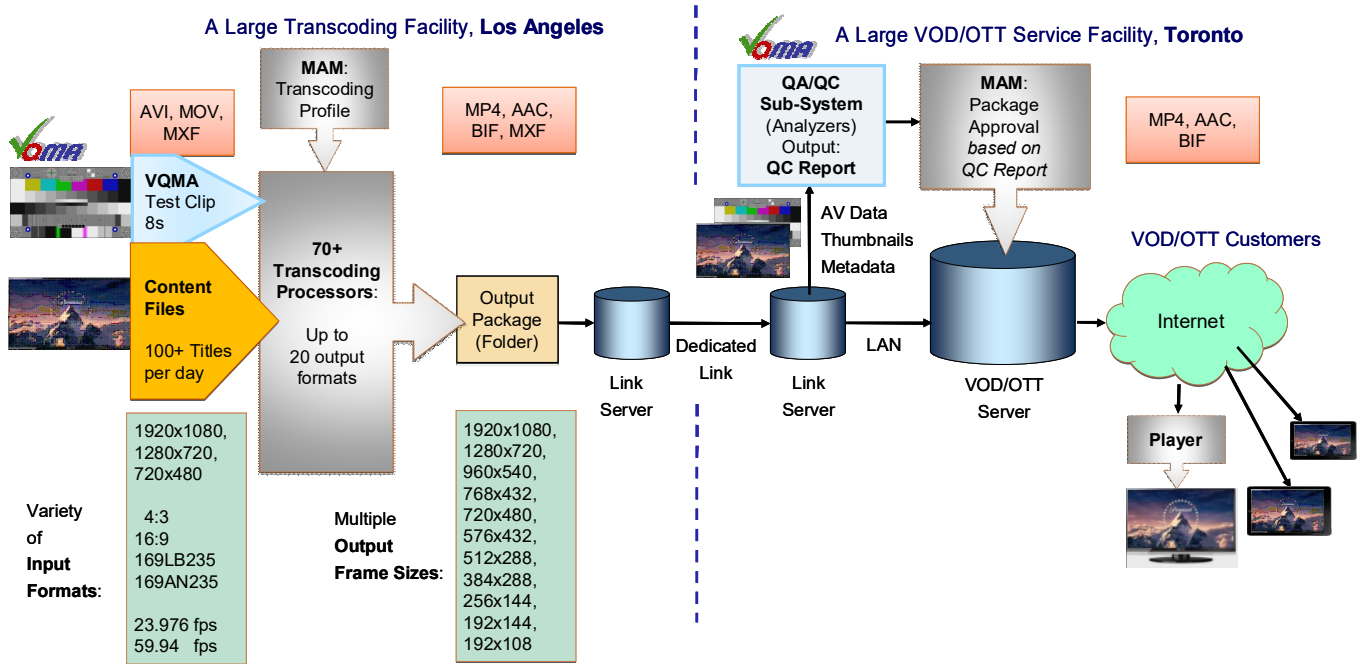
- **BMP, JPG, AVI, Y4M, MOV, MP4, etc.** variety of codecs, formats and frame rates
- **Raw YUV 4:2:2 UYVY** multiplex, 16bpp

Single frame or Multi-frame (at least 8 frames)

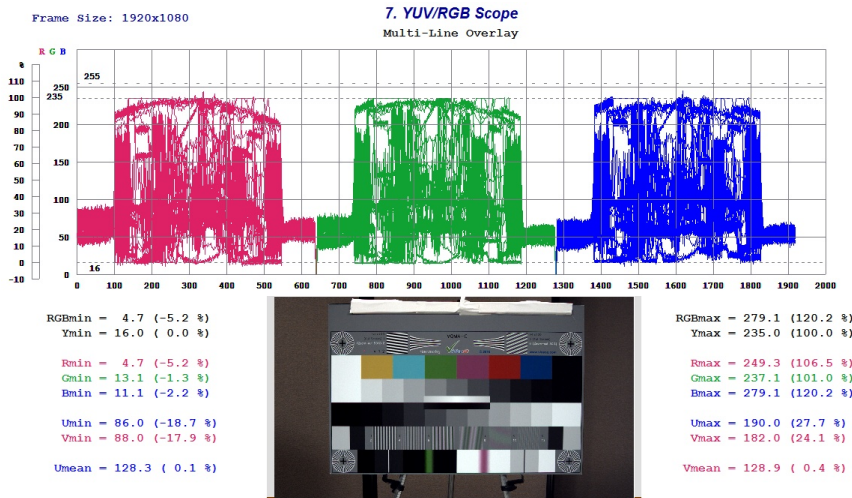


Video Processing Chain Analyzer Software

Example of Large-Scale QA/QC System Workflow



Waveform Scope Page Example (Camera)



Waveform Scope Features

- **Scope View:** Y, YUV, R, G, B, RGB, Vectors
- **Line Select:** Smart Line Number Dialog
- **Band Select:** Go to the relevant VQMA band
- **Overlays:** Line, Frame or Multi-line Scan
- **YUV/RGB Parade:** Frame or Line
- **Cursor:** Selected Line Position Highlight
- **Graticules:** YUV/RGB, in % and 8bit levels
- **Smart Read-out:** YUV & RGB in 8b and in %
- **Smart Analytics:** Min, Max, Mean for ROI
- **Smart Display:** Shows relevant data only
- **Smart Navigation:** Persistent display mode

VideoQ, Inc. – Critical Picture Quality Technologies for Broadcast, Consumer Electronics, Transcoding, Video Data Compression, HDR, UHD, WCG, SDR, SD, HD, Digital Cinema, CDN, Mobile TV, IPTV.

We make tools for you to do the best work within the most complicated modern HDR / WCG / SDR video supply chains and multi-format, multi-resolution workflows. We make automatable software for Video Formats Conversion, Video Parameters Normalization, Video Processing Chain Integrity & Performance Validation.

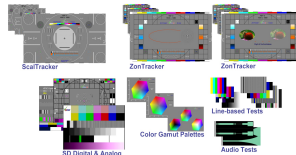
Detailed Training Presentations and more information are available from VideoQ website, VideoQ Technical Blog and VideoQ YouTube Channel.

Related VideoQ products:

VQTS4K
Video Generator-Analyzer



VQL
Library of Advanced Test Patterns



VQV
Multi-format Media Files Viewer-Analyzer

