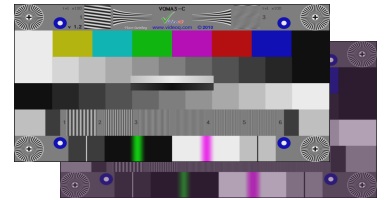
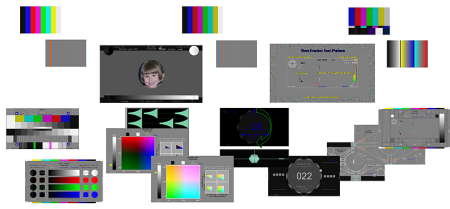


VQTS-200 – 3G/HD-SDI/HDMI Video Quality Analysis System

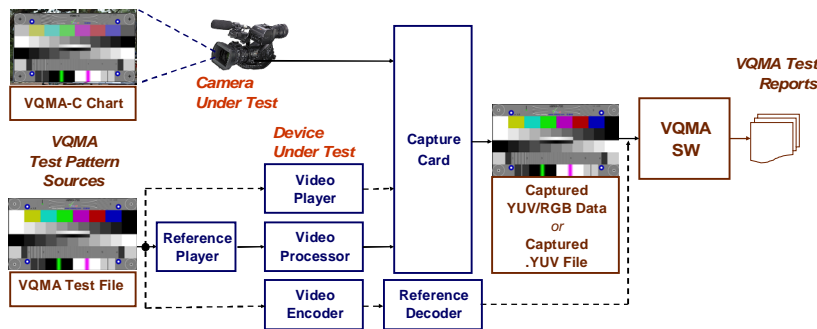


PASS / FAIL

Industrial PC with 3G-SDI/HDMI Interfaces, VideoQ Test Patterns and VQMA-3 Analyzer & Scope

- VQTS-200 is a self-contained solution, combining test pattern generator, uncompressed capture and image quality analyzer
- Ideal tool for development labs, software developers and high volume manufacturers
- Easy-to-use tool, instantly revealing your compression codec, video camera or other video device performance
- User-selectable reporting modes: a) machine-readable file with Pass/Fail marks, b) detailed multi-page PDF document
- Manual and automated performance measurement, instant firmware verification and benchmarking
- Via its 3G-SDI & HDMI uncompressed inputs & outputs VQTS-200 tests and measures the performance of any video processor

VQMA-3 brings the proven reliable objective analysis methodology to 21st Century video QA/QC environment



VQMA-3 Analyzed Parameters

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

VQMA-3 Features

- Software executable under Windows™ (XP, Vista, Windows 7)
- Auto-analysis on the companion VQMA-C Matrix Test Pattern
- VQMA-C formats: Optical Chart, File, Test Signal, Test Stream
- Built-in Software Scope: YUV/RGB waveform monitor
- Noise Measurement and Scope work on any static YUV/BMP image
- Windows GUI mode for R&D and product verification
- DOS batch mode for automated QA/QC operation

Resolutions supported

Y YUV: 1280x720 or 1920x1080

Y BMP: any size from 640x480 to 1920x1200

Images of any size smaller than 1920x1080 are analyzed within 1920x1080 frame

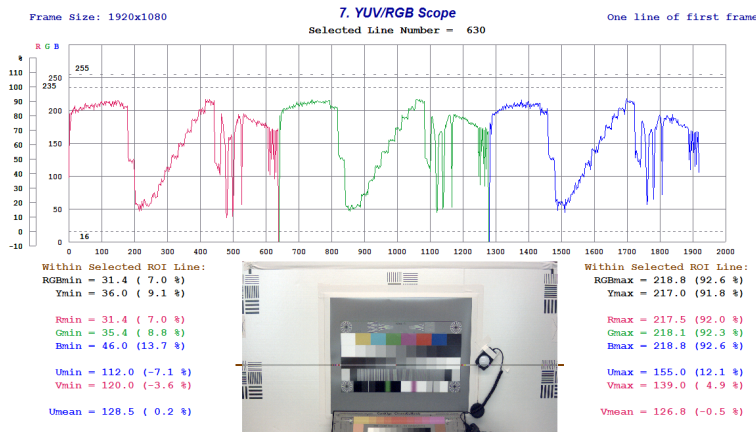
Input File Format

Y .YUV 4:2:2 progressive UYVY multiplex
Single frame or Multi-frame (at least 8 frames)

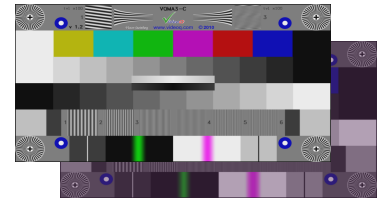
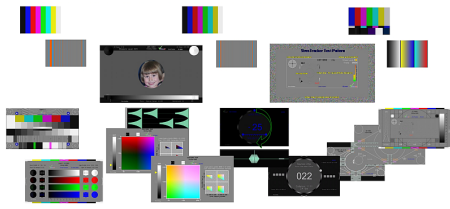
Y .BMP 24 bit per pixel, single frame

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/MHz
- **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** matching industry standard tools
- **Noise estimate** (+/-3dB) on single YUV frame



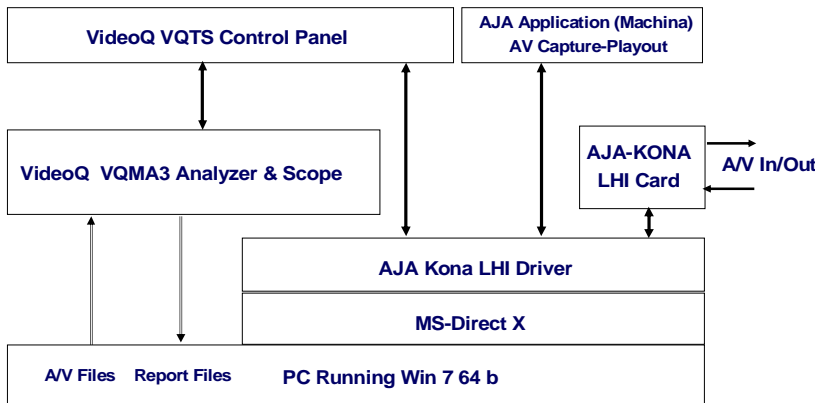
VQTS-200 – 3G/HD-SDI/HDMI Video Quality Analysis System



PASS / FAIL

Fast and effective tool for 3G-SDI/HD-SDI/HDMI equipment testing and video data fidelity verification

- Playback original uncompressed video materials – bit by bit, pixel by pixel, frame by frame
- Live preview and multi-frame capture of video and audio data in a variety of formats, uncompressed YUV data RAID storage
- Visual, instrumental and automated tests using VideoQ VQL Test Patterns Library and built-in VQMA3 Analyzer & Scope
- 3G-SDI, HD-SDI, SDI, HDMI 1.3 and DVI 1.0 compliance for playback and capture of audio and video content



VQL Content Categories

- VQMA3 Matrix Test Pattern
- Scaling, Cropping, Interlace, and Sharpness Tests
- Levels, Colors, and Gamma Tests
- Motion Portrayal and Motion Blur Tests
- Moving Zone Plate Test
- Standard Line-based Test Patterns
- Live clips – high quality samples

Resolutions and Frame Rates

- 720x480:** 59.94p, 59.94i
- 720x576:** 50p, 50i
- 1280x720:** 50p, 60p
- 1920x1080:** 23.98p, 24p, 30p, 50i, 60i, 50p, 60p

Files in any resolution are played-out in actual size or scaled to the selected size and aspect ratio

Aspect Ratios

- Normal: **4:3, 16:9**
- Letterboxed: **2.35:1 for 16:9, 16:9 for 4:3**
- Anamorphic: **2.35:1 for 16:9, 16:9 for 4:3**

Record

Analyze

Play-out

Preview

VideoQ, Inc. – California-based company, focused on video test & measurement and video enhancement technologies, products and services. More than 50 man-years of award-winning experience in the field of Broadcast, Consumer Electronics, Transcoding and Video Data Compression.

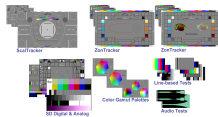
VideoQ is a renown player in calibration and benchmarking of Displays, Video Projectors, Transcoders, Graphics and Video Processors, instantly revealing artifacts, problems and deficiencies, thus raising the bar in video quality experience.

Other related VideoQ products:

VQDM-100



VQL



VQTS-300



VQMA-3



VQS-300

