



VQMPc Series Test Patterns

Visual

Aural

Fast setup and QA/QC tool for:

Objective Automated



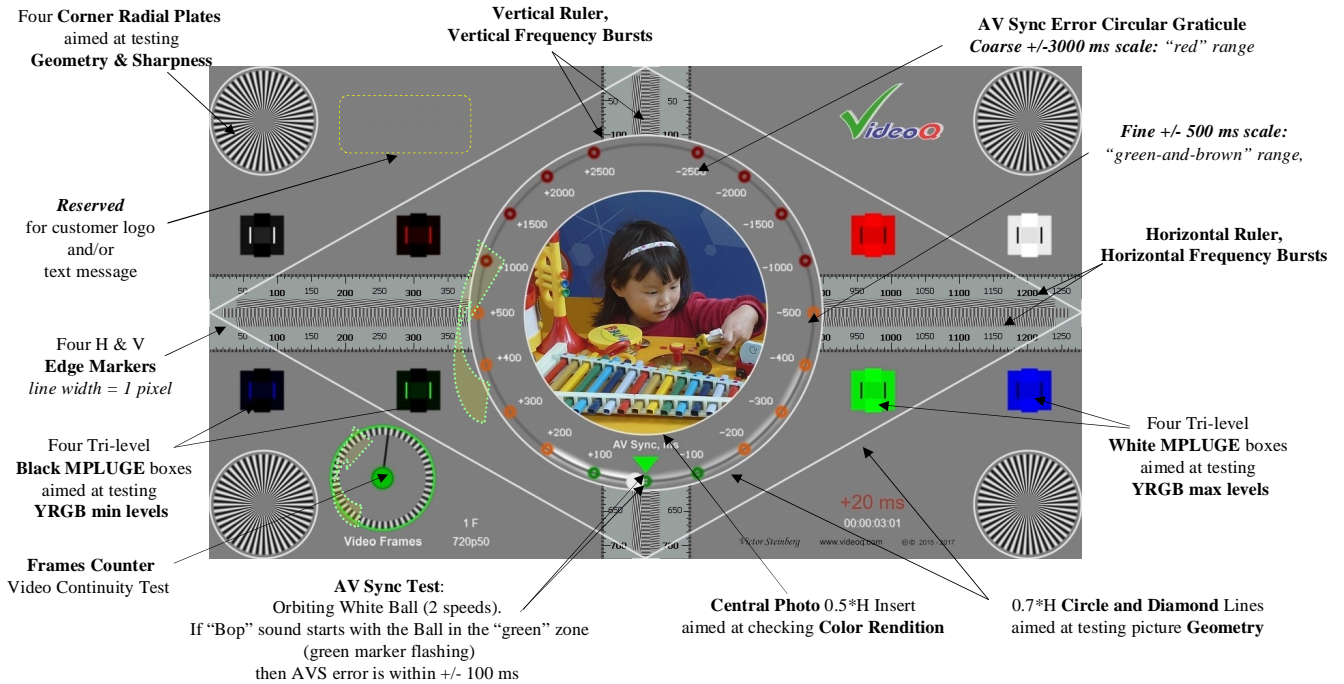
- Direct audio-visual quality estimation by eyes and ears
- Instrumental, semi-automatic and fully automated AV levels and AV sync measurement using 3rd party and VideoQ software tools



The most popular VideoQ test pattern used by the renown industry leaders:

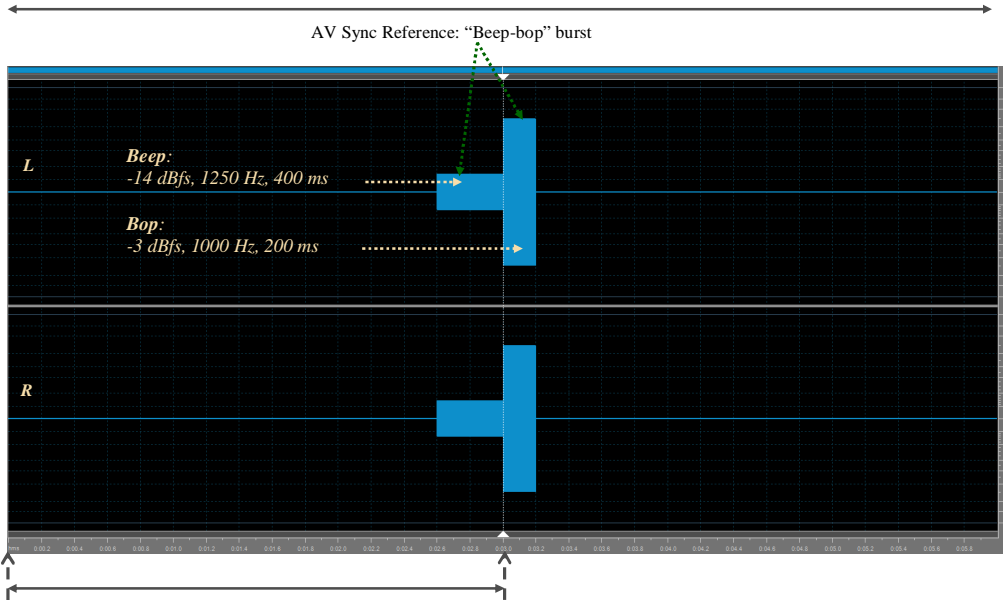
- Major R&D labs uses SDR and HDR versions of this test for processing chain performance validation and product verification
- The most valuable US media company uses dynamic VQMPc test for instant CDN/OTT quality estimation
- VQMPc UHD version was used at Olympic Games 2018 for international broadcast system setup & configuration spot checks

VQMPc Test Composition



AV Sync Test Audio Component Time-line

Loop duration: 6,000 ms (6,006 ms for 23.976, 29.97 and 59.94 fps)



AV Sync Reference Position = 3000 ms (3003 ms for 23.976, 29.97 and 59.94 fps)



VQMP Series Test Patterns

Features

Multi-purpose, multi-resolution, multi-format test pattern to check at glance:

- Image Geometry, Aspect Ratio, Overscan and other display scaling effects
- Scaling Quality or proof of no-scaling
- Color Space, levels setup and general color rendition quality evaluation
- Dynamic Range Modes: SDR, HDR-PQ and HDR-HLG versions
- 2D Frequency Response and Sharpness Correction settings
- Frames Continuity, codec freeze-skip, 3:2 pull-down, frame rate conversion
- De-interlacing Quality: check artifacts on radial plates and moving white ball
- AV Sync Errors within +/-3000 ms range
- Automatic AV Sync Errors Measurement via VideoQ software tools

Frame Size

From **720x480** to **7680x4320 (8K UHD)**

Frame Rate

From **23.976 fps** to **60 fps**

Raw Video/Audio File Formats

YUV: planar 4:4:4, 10 bit

WAV: 2.0 LR or 5.1 surround sound, 48 kHz, 24 bit

Encoded Media File Format

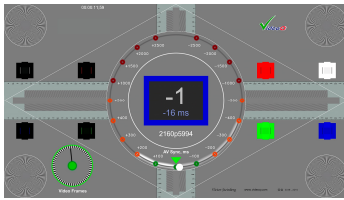
MP4: 4:2:2 or 4:2:0, 8, 10 or 12 bit

Other formats are available on request

VQMP Test Variants

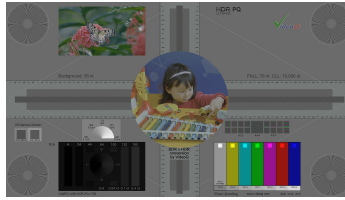
VQMP-C

Frame counter with ms readout



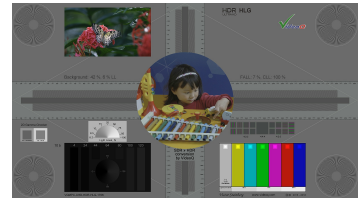
VQMP-HDR-PQ

Static HDR Test, PQ version



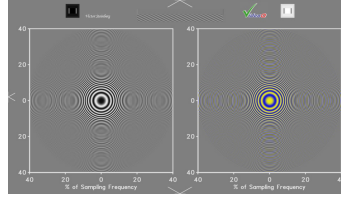
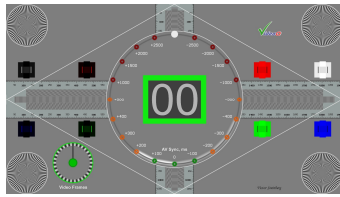
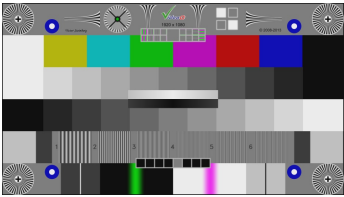
VQMP-HDR-HLG

Static HDR Test, HLG version



VQMP-E – Enhanced 8s long dynamic test consisting of 3 segments:

- 1s long **VQMA** matrix test *suitable for automated video processing quality analysis*. VideoQ **VQMA** Analyzer recommended
- 6s long **VQMP-C** test *suitable for audio-visual estimation and instrumental measurements*. VideoQ **VQV** Viewer-Analyzer recommended
- 1s long **FZP** (Flashing Zone Plates) test *revealing scaling & compression artifacts*. VideoQ **VQV** Viewer-Analyzer recommended



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 Chain Integrity and Performance Validation.

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

Related VideoQ products:

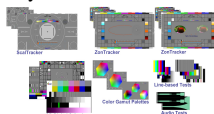
VQMA

Video Analyzer and Scope



VQL

Library of Advanced Test Patterns



VQV

Media Files Viewer-Analyzer

