



PQA

Picture Quality Analyzer

Release Notes

This document supports software installer version 4.1.11

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Release notes

This document supports software version 4.1.11 of the PQA software, which can be installed on the following products:

- MTSA-HW MPEG Test System
- MTSA-PC MPEG Test System (software-only)

PQA Software version 4.1.11 changes the licensing model from Dongle based licensing to Telestream software-based licensing.

New Video Format Support

Software version 4.1.6 of the PQA software adds support for YCbCr 4:2:0 10-bit planar video formats. The YCbCr 4:2:0 10-bit format is supported only for .yuv files created by MTS4EA which are encoded with one of the "two byte LSB/MSB first" options.

Known issues and behaviors

- It is required to manually install Visual C++ Redistributable Package "vcredist_x64.exe" for Visual Studio 2013 after installing the PQ software. The package can be downloaded from the Microsoft Download Center at <https://www.microsoft.com/en-US/download>. Telestream PQA software will not launch if this package is not installed on the system.

Note: Installing Visual C++ Redistributable Package "vcredist_x64.exe" may uninstall Visual C++ Redistributable Package "vcredist_x86.exe". Please check if you find "vcredist_x86.exe" missing in Control Panel > Add or Remove Programs. If so, manually install "vcredist_x86.exe" from <https://www.microsoft.com/en-US/download>.

- The Contrast and Brightness settings in the Display Settings dialog box (Configure > Display Settings) might not operate correctly in the Overlay View.
- When reviewing the results of display measures calculated using different frame rates, original images are displayed rather than up-sampled interpolations. This can cause the results map to appear temporally advanced, or delayed by up to half a frame when compared to the lower frame rate sequence.
- In the Overlay View, video sequences with different resolutions are not spatially aligned.
- The Standalone Attention Model uses the Reference sequence for dual-ended measurements and the Test sequence for single-ended measurements.
- If the reference and test sequences have different resolutions and the measurement contains the Artifact Detection node but does not contain the View Model node, the system might become unstable. To avoid this situation, Tektronix suggests that when a measurement

includes the Artifact Detection node, you ensure that the measurement also includes the View Model node whenever the reference and test sequences have different resolutions.

- The vertical and horizontal resolution for .rgb and .yuv files must be multiples of 4.
- If the reference or test file has a "," (comma) character in its file name, the system might become unstable when the measurement result is recalled in review mode. To avoid this, do not use commas in file names.

SWAP action restriction

When you press the SWAP button in the SGAC window with one generate channel using RGB file format and the other generate channel using YUV file format, a couple of black frames may be seen each time you press the SWAP button.

Decoding .3gp streams

Decoding .3gp stream files may result in the created YUV file having the wrong frame rate. If you know the frame rate of the .3gp file, you can work around this problem by selecting the correct frame rate using the Format button.

About full reference measurements with interlaced video content

Interlaced video content can be measured accurately only when the Reference and Test video both have interlaced video content and spatial alignment is not needed to be set differently from the default scale and shift.

About spatial and temporal alignment

Automatic spatial and temporal alignment work by calculating the correlation between the reference video sequence and the test video sequence. Video that is still, contains little movement, or consists of simple contents (such as a color bar test pattern signal), can be difficult to align automatically.

If you receive a warning when you attempt an automatic temporal or spatial alignment, try the automatic alignment again starting with another frame that contains more complex contents and movement. You can change the starting frame by changing the From frame setting on the Temporal Sync tab.

Auto temporal alignment only finds one offset for a pair of sequences. If the test sequence contains frozen or skipped frames, the automatic temporal alignment algorithm will not be able to realign the sequences.

Auto alignment cannot be selected for Luma Gain and Offset Brightness on the Spatial Alignment tab. However, you can manually set the Luma Gain and Offset Brightness on the Spatial Alignment tab and those settings will be used by the selected measurement. If you want

the PQA to align the video sequences for luma automatically, you must select Auto for Luma Gain and Offset Brightness in the View Model configuration node.