ALEXA SXT / 65 / SXT W / LF/ AMIRA & Mini / LF
ARRI Color Tool 1.8.0 Beta

RELEASE NOTES

Date: 21 August 2019
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ARRI provides the ARRI Color Tool (ACT), formerly AMIRA Color Tool, as a free software that allows you to create, modify and store looks as “ARRI Look File2” (ALF-2) outside the camera. The software can playback native camera footage (Apple Quicktime clips) or DPX frame grabs and export/import/create ARRI Look Files. You can import a custom 3D LUT that was created in a 3rd party color grading tool or export ARRI Look Files (extract the looks from the file header). Additionally you can export any ARRI look file as a 3D LUT, separate CDL parameters (XML) or a 3D LUT including CDL parameters for use in other applications.

The ARRI Color Tool enables you to create looks faster and more convenient than via the camera menu. The software offers easy to use mouse and keyboard color controls using an intuitive industry-standard keyboard layout.

2 System Requirements

Mac Systems:
- OS X 10.12
- OS X 10.13
- OS X 10.14

PC Systems:
- 64 bit Windows 7
- 64 bit Windows 8
- 64 bit Windows 10

3 Feature Overview

3.1 ACT 1.8.0 Release

New ACT 1.8.0 features

1. Support of all new ALEXA Mini LF MXF/ProRes recording formats:
   - ALEXA Mini LF Open Gate: 4.5K MXF/ProRes
   - ALEXA Mini LF 2.39:1: 4.5K MXF/ProRes
   - ALEXA Mini LF 16:9: UHD, 2K and HD MXF/ProRes

- Load a QuickTime/ProRes file from the ARRI ALEXA SXT, ARRI ALEXA Mini, ARRI ALEXA LF or ARRI AMIRA camera.
- Can create Looks for SDR displays in Rec-709 / Rec-2020 and HDR displays in Rec-2100 PQ and Rec-2100 HLG (SMPTE 2084). Clips can be displayed in Log C, default video or with ALF-2 looks.
- Looks can be applied from ACT Look Library or from clip file header (embedded look).
- Looks can be created by importing a 3DLUT or modifying the video parameter (black gamma, knee, pedestal, lift, gain, gamma and saturation).
- Looks can be modified by ASC CDL parameter (slope, offset, power and saturation).
- The created Look can be exported as ALF-2 Look File (.aml) or as 3D LUT.
- Pixel picker for accurate RGB value readings.
- Save the viewer image as a *.dpx or *.jpeg file for exchange with colleagues.

3.2 Changes since 1.7.0

<table>
<thead>
<tr>
<th>Version</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7.0.1</td>
<td>- Bug fixes in new version</td>
</tr>
<tr>
<td></td>
<td>- Added additional desqueeze factors 1.65 and 1.8 for anamorphic images in viewer</td>
</tr>
<tr>
<td>1.6.0.1</td>
<td>- Bug fixes in new version</td>
</tr>
<tr>
<td></td>
<td>- Added compatibility for ALEXA LF ProRes files</td>
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<tr>
<td>1.5.0.1</td>
<td>- Bug fixes in new version</td>
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<td></td>
<td>- 3D LUT export option also for Windows platform available</td>
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<td></td>
<td>- Support of the new wide gamut HDR colors spaces (Rec-2100 PQ and Rec-2100 HLG) in</td>
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<tr>
<td></td>
<td>ALEXA Mini and AMIRA cameras.</td>
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<tr>
<td>Version</td>
<td>Changes</td>
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<tr>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>1.4.0.1</td>
<td>- Bug fixes in new version</td>
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<tr>
<td></td>
<td>- Creating the ARRI Look File 2 (ALF-2) format for ALEXA SXT cameras</td>
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<tr>
<td></td>
<td>- Support of the new wide gamut colors spaces (Rec 2020, P3 DCI, P3 D65, P3 D60) in ALEXA SXT cameras</td>
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<tr>
<td>1.3.0.b2</td>
<td>- Bug fixes in new version</td>
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<tr>
<td>1.3.0.b1</td>
<td>- Added desqueeze option for anamorphic images in viewer</td>
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<td>- Support for ARRI Look File 1</td>
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<td></td>
<td>- *.xml files can be loaded, displayed and exported as a 3D LUT</td>
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<td></td>
<td>- Export of 3D LUTs for Canon and Flanders Monitor</td>
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<td></td>
<td>- Support for different Target Color Spaces. (Rec 709, Rec 2020, DCI P3, DCI D65, DCI D60)</td>
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<tr>
<td></td>
<td>- The wide gamut is supported beginning with AMIRA/ALEXA Mini SUP 4.0</td>
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<tr>
<td>1.2.0.b1</td>
<td>- Adding of Color management for viewer with icc profiles. Selectable in ACT preferences Color Management.</td>
</tr>
<tr>
<td></td>
<td>- Support for different Target Color Spaces</td>
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<tr>
<td></td>
<td>- *.xml files can be loaded, displayed and exported as a 3D LUT</td>
</tr>
<tr>
<td>1.1.0.b1</td>
<td>- File name length limit of ALEXA Mini/AMIRA (32 Characters) implemented</td>
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<tr>
<td></td>
<td>- Improved stability</td>
</tr>
<tr>
<td></td>
<td>- Added compatibility for ALEXA Mini ProRes files</td>
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<tr>
<td></td>
<td>- Renaming to ARRI Color Tool</td>
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<tr>
<td>1.0.0.b3</td>
<td>- *.aml files are now being associated with ARRI Color Tool (doubleclick opens ACT)</td>
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<tr>
<td></td>
<td>- “Reveal in Finder” for DPX enabled</td>
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<tr>
<td></td>
<td>- Timeline now deactivated for single frame sequences</td>
</tr>
<tr>
<td></td>
<td>- Color-space buttons enabled for Isabella</td>
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<tr>
<td></td>
<td>- New tooltips added</td>
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<td></td>
<td>- Online Help now points to the ARRI Color Tool Website</td>
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</table>
4 Getting started

To get you up to speed quickly, we have created a screencast series that you can watch on our website:


The tutorial called “ARRI Color Tool – A Quick Overview”. There will be more films coming soon.

There is also a very informative white paper (“AMIRA Color by Numbers”), which will give you a good introduction about the ARRI look workflow in AMIRA, ALEXA Mini, ALEXA SXT and ALEXA65.

Please check out:


![Fig. 1: ACT Preferences menu](image)

**Color-Management in viewer with icc display profile**

To get the correct icc profile please check which icc profile is currently used in the display profile preferences.

**Wide gamut support**

To create a new Look with wide gamma support, please choose first the appropriate Target Color Space in the color management preferences and create then the new Look by selecting Menu → Edit → New Look File.

Available Target Color Spaces are: Rec 709, Rec 2020, P3-DCI P3, P3-D65,P3-D60, Rec-2100/PQ and Rec-2100/HLG.

*Please be aware SDR displays can not reproduce ALF-2 looks for HDR color spaces (Rec-2100/PQ or Rec-2100/HLG) correctly.*

5 Known Issues

**Realtime playback not possible on all systems**

Depending on your system configuration realtime playback may not be possible. We recommend using systems with internal SSDs, Mac OS X 10.12 or higher and 16GB of RAM.

- 3D LUT export for the HDR color spaces Rec. 2100 PQ and Rec. 2100 HLG are incorrect.
6 Questions and Contact

We ask you to report all problems, crashes, wishes and also things you like via eMail to digitalworkflow@arri.de. Please also report if the GUI is getting slower, or if you do not have real time playback. Please include details about your mac’s hardware and OS X version. We appreciate your feedback.

7 External Libraries

7.1 Nvidia

This software contains source code provided by NVIDIA Corporation.

7.2 Libtiff

www.libtiff.org

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7.3 Ibjpeg

www.jpeg.org

This software is based in part on the work of the Independent JPEG Group

7.4 libzlib

www.zlib.net

License:

Interface of the 'zlib' general purpose compression library version 1.2.7, May 2nd, 2012

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Jean-loup Gailly: jloup@gzip.org
Mark Adler: madler@alumni.caltech.edu

7.5 Boost
www.boost.org

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7.6 Tinyxml
www.grinninglizard.com/

License:

www.sourceforge.net/projects/tinyxml

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www.openexr.com

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7.8 Little CMS

http://www.littlecms.com/

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7.9 Python

https://www.python.org/

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7.10 NumPy

http://www.numpy.org/

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