



ALEXA SXT / 65 / SXT W / LF

AMIRA & Mini / LF

ARRIRAW Converter 4.4.0.0 (GUI)

RELEASE NOTES

Date: 20 April 2021

Table of Content

- 1 Introduction 3
- 2 System Requirements 4
- 3 Feature Overview and Bug Fixes 5
 - 3.1 New Release 5
 - 3.2 Past Changes 5
- 4 Getting started 11
- 5 Known Issues 11
- 6 Questions and Contact 11
- 7 External Libraries 11

1 Introduction

The ARRIRAW Converter 4.x. introduces a new geometry interface provided by the ARRIRAW SDK 6.x, along with faster rendering on NVIDIA GPUs using CUDA.

ARRI's Reference Tool

Since its debut, the ARRIRAW Converter has been ARRI's free reference tool for processing ARRIRAW files to produce output of optimal quality. The ARRIRAW Converter application, available for Mac OS X and Windows, provides a graphical user interface (GUI) 'wrapper' of the reference SDK — the same SDK that is used in postproduction tools such as Colorfront OSD/Transkoder, FilmLight BaseLight, Blackmagic DaVinci Resolve, Filmmaster Nucoda, Quantel Pablo, Autodesk Lustre, The Foundry Nuke, Adobe Premiere Pro and many others.

Not all tools use the ARRIRAW SDK

The ARRIRAW files are not encrypted, allowing applications to provide custom debayering tools in addition to or instead of ARRI's reference SDK. Such applications that implement their own debayering process might have default settings which lead to results that differ from those of the reference SDK in their sharpness or in their format and/or size of scaled output. Thus you can perceive the value of a reference tool: you can see the "true" images, as ARRI intended them to be processed, for your consideration.

Whenever you are not sure about the image quality you are achieving with a post production tool capable of processing ARRIRAW, use the ARC to verify the images. Load the images, set all values to their defaults, and you will see pictures that are as pure and faithful to the captured image as possible.

2 System Requirements

Mac Systems:

- OS X 10.11
- OS X 10.12
- OS X 10.13
- OS X 10.14
- OS X 10.15

PC Systems:

- 64 bit Windows 10

For GPU or CUDA processing:

- AMD/ATI or NVIDIA graphics adapter with at least 2048 MB of RAM. If processing ALEXA65 footage, 3072 MB of VRAM are recommended
- Latest AMD/ATI or NVIDIA GPU driver installed

A display with at least 1920x1080 resolution

3 Feature Overview and Bug Fixes

3.1 New Release

| Version | Changes | Bug fixes |
|---------|--|---|
| 4.3.0 | <ul style="list-style-type: none"> Support of all new ALEXA Mini LF MXF/ARRIRAW recording formats: <ul style="list-style-type: none"> 3.4K S35 3:2 - 3.4K Extraction and display of new lens metadata for lens converter e.g. Signature Zoom Extender 1.7x <ul style="list-style-type: none"> Model Name Serial Number Physical Length Light Loss Factor Focal Length Multiplier | <ul style="list-style-type: none"> fixed export for file format Tiff |

3.2 Past Changes

| Version | Changes | Bug fixes |
|-----------|--|--|
| 4.3.0 | <ul style="list-style-type: none"> An extended sharpening range from -5 to +5 and now up to +35 provides a stronger resharpening possibility. | <ul style="list-style-type: none"> fixed export for file format OpenEXR |
| 4.2.4 | | <ul style="list-style-type: none"> QuickLook plugin bugfixes (there was a conflict when Apples Pro Video-Format was installed in parallel) |
| 4.2.3 | <ul style="list-style-type: none"> MXF/ProRes export Using ARRIRAW SDK 6.2.2.0 with bugfixes | <ul style="list-style-type: none"> Fixed pixel aspect ratio metadatum in extr rendering Fixed render queue issue Minor bugfixes |
| 4.1 Beta | <ul style="list-style-type: none"> Support of all new ALEXA Mini LF MXF/ARRIRAW recording formats: <ul style="list-style-type: none"> ALEXA Mini LF Open Gate: 4.5K MXF/ARRIRAW ALEXA Mini LF 16:9: UHD MXF/ARRIRAW ALEXA Mini LF 2.39:1: 4.5K MXF/ARRIRAW Support of the CODEX HDE (High Density Encoding) file format .arx, which was created with the Codex Device Manager 5.0 and higher | <ul style="list-style-type: none"> Fixes render queue error "cache full" Several other bug fixes |
| 4.0. Beta | | |

| | | |
|-------------|--|--|
| | <ul style="list-style-type: none"> • New graphical user interface for image scaling and cropping • Input format selection for cropping images by frame lines or custom crop. • Output format with pre-defined scaling templates for standard target resolutions or by userdefined resolutions. • Using ARRIRAW SDK 6.0.3.0 • New scaling filters and algorithms. For this reason, result images with the same settings may differ from the results of previous versions. • New detail parameter to have more control over frequency handling in the scaler. See Texture Control white paper for details: https://www.arri.com/service/search/en/49664?query=texture%20white | <ul style="list-style-type: none"> • Fixes OpenCL rendering on various GPUs, especially ATI and Intel • Several GUI fixes • Processing fixes included with the ARRIRAW SDK 6.0.3.0 |
| 3.5.3.3/4/5 | <ul style="list-style-type: none"> • Support of all new ALEXA LF ARRIRAW recording formats: <ul style="list-style-type: none"> • ALEXA LF Open Gate: 4.5K ARRIRAW • ALEXA LF 16:9: UHD ARRIRAW • ALEXA LF 2.39:1: 4.5K ARRIRAW • New graphical representation of dynamic Lens Data (Iris, Focal length and Focus distance) | <ul style="list-style-type: none"> • Fixes in half size proxy scalings • Corrected colourspaces LogC_Film in processing version 5 Fixes in edge handling of 3414px downscale formats on CPU • Fixed a bug in the check of whitebalance coefficients, which could lead to a false positive error when using extreme values for cct and tint • Fix in denoiser: enhanced ghosting reduction Corrected colour matrix for ALEXA LF footage |
| 3.5.0.9 | <ul style="list-style-type: none"> • New HDR colourspaces Rec2100/PQ and Rec2100/HLG • Support of extended white balance CC values from -16 to +16 | <ul style="list-style-type: none"> • Fixes in half size proxy scaling • Fixes in B/W footage processing on CUDA • <globaldir> in output directory field is now resolved correctly Corrected edge handling in |

| | | |
|---------|---|---|
| | | <p>CUDA</p> <ul style="list-style-type: none"> • Corrections in the CPU and CUDA processing parameterisation, which leads to subtle differences using ADA5-HW, ADA-3 HW and ADA-3 SW • ADA5-HW DeBayering: some subtle corrections for Alexa65 and Alexa Mini bayer patterns, both on CPU and GPU • ADA5-SW DeBayering: some subtle corrections for Alexa65 and Alexa Mini bayer patterns, both on CPU and GPU • ADA5-SW DeBayering: corrections of visible colour fringes of Alexa Mini footage on GPU • ADA5-SW and ADA5-HW DeBayering on CPU: due to arithmetic corrections, very subtle differences may occur with any footage |
| 3.4.5.4 | / | <ul style="list-style-type: none"> • General improvements in stability • General improvements in performance for Windows GUI version Fixes in |

| | | |
|---------|---|---|
| | | <p>look handling misbehaviours</p> <ul style="list-style-type: none"> • Fixes in underlying ARRIRAW SDK • Improvements in performance of mxf file handling and caching • The scaler in proxy mode have been modified, so deviations with respect to previous releases are expected. This change also affects some native formats |
| 3.4.5.3 | <ul style="list-style-type: none"> • New option for ANR-1 Noise Reduction of images with higher Exposure index New anamorphic factor 1.33 • Anamorphic desqueeze available for all native formats in combination with any anamorphic factor • In the version number the 'b', standing for 'build', is omitted as it caused quite some confusion. | <ul style="list-style-type: none"> • General improvements in stability • General improvements in performance for Windows GUI version Fixes in look handling misbehaviours • Fixes in underlying ARRIRAW SDK • Improvements in performance of mxf file handling and caching • The scaler in proxy mode have been modified, so deviations with respect to previous releases are expected. This change also affects some native formats |
| 3.4 | <ul style="list-style-type: none"> • Support of new MXF/ARRIRAW recording formats 2.8K (2880x1620 pixel) Open Gate 3.4K (3424x2202 pixel) | Several bug fixes |

| | | |
|---------------|--|-------------------|
| | <ul style="list-style-type: none"> • For MXF/ARRIRAW Open Gate 3.4k are several recording aspect ratios available: <ul style="list-style-type: none"> • 4:3 2.8K (2880x2160 pixel) • 2.39:1 2K Ana. (2560x2145 pixel) • 16:9 HD Ana. (1920x2160 pixel) • Support of new ALEXA SXT 16by9 3.2K (3168x1782 pixel) ARRIRAW. • New ARRI Look File 2 (ALF-2) support for ALEXA Mini and ALEXA SXT footage. • New ALF-2 look wide gamut color space support. Rec2020, DCI P3, DCI D60 and DCI D65 are selectable for View room display. • New Look library for ALF-2 Looks in View room. • New Metadata group below the Processing group in View room. Configurable in preferences tab Metadata. New media cache for better play back and render performance. Configurable in preferences tab Browser and Display. • New file export format: ARRIRAW (.ari) <ul style="list-style-type: none"> • Is available only for MXF/ARRIRAW files to convert .mxf files into .ari file sequences. • Export format ARRIRAW is selectable in the Render Target Format settings. • New file export format: ProRes (.mov) <ul style="list-style-type: none"> • The 4444 XQ, 4444, 422 HQ, 422; 422 LT, and 422 Proxy codecs are supported. • ProRes can be exported as Quick Render Clip in the View room. • ProRes is now selectable in the Render Target Format settings. • Exported ProRes Files will keep the original metadata of the ARRIRAW source file. (Please see: ARRI Metadata White Paper for ALEXA Mini and SXT) • New Color Space configurations for ProRes file exports available. In Render Target tab Format & Color Space the color space of the embedded ALF-2 look can be used by selecting "Prefer Look Master Color Space". • Additional metadata attributes stored in file header of exported OpenEXR files. Exported OpenEXR Files will keep all the original metadata of the ARRIRAW source file. (Please see: ARRI Metadata White Paper for ALEXA Mini and SXT). • New "input file name" variable in Output Directory. Variable "input file name" is selectable in the Render Target tab Format Location & Naming setting and will create a separate clip name directory for each .mxf ARRIRAW clip. | |
| 3.2 | <ul style="list-style-type: none"> • Support of new render output formats (aspect ratios and resolutions) for ALEXA 65 footage • Improved color processing for ALEXA 65 footage • Bins, sequences and clips that are not part of a sequence now appear in alphanumeric order in the Project Files area | Several bug fixes |
| 3.2 Open Beta | <ul style="list-style-type: none"> • Support for new debayering mode ADA-5 HW. This is the hardware compatible version of the ADA-5 SW, which will be implemented in | Several bug fixes |

| | | |
|-----------------|--|-------------------|
| | <p>ARRI cameras from early 2015 on</p> <ul style="list-style-type: none"> • Support for ALEXA65 Open Gate (6560 x 3100 px): native, 4K and 2K resolution • Support for ALEXA65 16:9 (1.78) (5120 x 2880 px): native resolution • Support for ALEXA65 3:2 (1.50) (4320 x 2880 px): native resolution | |
| 3.1 | <ul style="list-style-type: none"> • Support for new debayering mode ADA-5 SW, including parameters for ADA-5 SW-specific fine-tuning. This debayering mode eliminates the issue of overshooting at image edges mentioned in the ARRIRAW SDK 4.5 release notes under 'Known Bugs & Limitations' and the use of ADA-5 is strongly recommended for process photography, especially bluescreen or redscreen photography. • Support for 4:3 cropped (ALEXA software version SUP 10.0) image format: 2:1 anamorphic desqueeze from full-height 2578 x 2160 4:3 capture to HD, 2K, Quad HD and 4K resolutions Support for image rotation, assisting the use of UWZ lenses or upside-down mounted cameras • Various bug fixes, especially in format handling | Several bug fixes |
| 3.0 | <ul style="list-style-type: none"> • New render output formats of aspect ratio 2.39 for all sensor formats • DPX multi chunk header now contains the ARRI V3 header and the applied render settings. The render settings are automatically extracted from the DPX sequence into a text file when using the latest ARRI Meta Extract (3.0.0.b128 or above) • Enhanced usability of the look feature • Enhanced stability of the software | Several bug fixes |
| 3.0 Open Beta 2 | <ul style="list-style-type: none"> • 4K, 4K DCP and UHD-1 for 16:9, 4:3 and OpenGate ARRIRAW formats (ALEXA SUP9 feature) • Extended tint value range from -12 to +12 (ALEXA SUP9 feature) • User Pixel Masking (ALEXA SUP9 feature) New metadata panel design • Monochrome sensor support (only suitable for footage shot with monochrome ALEXA cameras) | Several bug fixes |
| 3.0 Open Beta 1 | <ul style="list-style-type: none"> • New user interface • Projects containing bins and sequences • Timeline for sequences • Look editor now part of ARC • Metadata panel • Multiple render queues and render targets • Extract metadata from ARRIRAW files • Preview of ARRIRAW files in Mac OS X Finder (plugin is installed automatically) | Several bug fixes |

4 Getting started

To get you up to speed quickly, we have created a screencast series that you can watch on our website <https://www.arri.com/en/learn-help/learn-help-camera-system/tools/arriraw-converter> . It gives you a short overview of the ARC 4.x geometry interface and detailed hands-on information about each feature. There is no written manual available at this time.

5 Known Issues

- Using Open CL with Nvidia graphics cards with less than 4GB RAM can lead to total crashes.
It is recommended to always use CUDA rendering for Nvidia hardware.
- On macOS operating systems there is a conflict for the QuickLook display of MXF/ProRes files if the Apple Pro Video Format 2.1.1 package and the ARC 4.1 are installed.
- .ari files with a file name containing the # character cannot be displayed or rendered
- Closing ARC while a render process is active in the RENDER room does not lead to a message dialog which informs about the active render process but instead closes ARC without any warning
- The Clip Settings Override tab in the RENDER room shows values that are not related to any clip in the render queue. The parameter values are "default" values (e.g. Exposure Index = 800 ASA) which are also shown (but not applied) if the respective checkbox is not activated
- Under Windows, ARC might not start and will not show any error message if an outdated graphics adapter (cf. System Requirements) is installed
- File Name variable "inputfile" cuts off file names for ALEXA Mini MXF/ARRIRAW files when the four digit camera ID contains a number for the last digit. (e.g. A001C001_YYMMDD_R000.mxf >>> A001C001_YYMMDD_R.mov)

6 Questions and Contact

If you have any questions about the application, please contact us via digitalworkflow@arri.de.

7 External Libraries

This software uses the following external libraries:

| Library | URL | License |
|---------|--|--|
| Libtiff | www.libtiff.org | Copyright (c) 1988-1997 Sam Leffler Copyright (c) 1991-1997 Silicon Graphics, Inc. Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that (i) the above copyright notices and this permission notice appear in all copies of the software and related documentation, and (ii) the names of Sam Leffler and Silicon Graphics may not be used in any advertising or publicity relating to the software without the specific, prior written permission of Sam Leffler and Silicon Graphics. THE SOFTWARE IS PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SAM LEFFLER OR SILICON GRAPHICS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ANY DAMAGES WHATSOEVER |

| | | |
|----------|--|--|
| | | RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER OR NOT ADVISED OF THE POSSIBILITY OF DAMAGE, AND ON ANY THEORY OF LIABILITY, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. |
| lbjpeg | www.jpeg.org | This software is based in part on the work of the Independent JPEG Group |
| libzlib | www.zlib.net | <p>Interface of the 'zlib' general purpose compression library version 1.2.7, May 2nd, 2012</p> <p>Copyright (C) 1995-2012 Jean-loup Gailly and Mark Adler</p> <p>This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:</p> <ol style="list-style-type: none"> 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution. <p>Jean-loup Gailly: jloup@gzip.org Mark Adler: madler@alumni.caltech.edu</p> |
| libbzip2 | www.bzip.org | <p>This program, "bzip2", the associated library "libbzip2", and all documentation, are copyright (C) 1996-2010 Julian R Seward. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:</p> <ol style="list-style-type: none"> 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission. <p>THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ARRIRAW Converter 4.0.0.0 Beta CMD – Release Notes Page 5 of 7 ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.</p> <p>Julian Seward: jseward@bzip.org bzip2/libbzip2 version 1.0.6 of 6 September 2010</p> |

| | | |
|---------|--|---|
| Boost | www.boost.org | <p>Software License - Version 1.0 - August 17th, 2003</p> <p>Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:</p> <p>The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.</p> |
| Tinyxml | www.grinninglizard.com/ | <p>www.sourceforge.net/projects/tinyxml</p> <p>Original code (2.0 and earlier)copyright (c) 2000-2006 Lee Thomason (www.grinninglizard.com) This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:</p> <ol style="list-style-type: none"> 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution. |
| Glew | glew.sourceforge.net | <p>The OpenGL Extension Wrangler Library Copyright (C) 2002-2008, Milan Ikits <milan.ikits@ieee.org> Copyright (C) 2002-2008, Marcelo E. Magallon <mmagallo@debian.org> Copyright (C) 2002, Lev Povalahev All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:</p> <ol style="list-style-type: none"> 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The name of the author may be used to endorse or promote products derived from this software without specific prior written permission. <p>THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY</p> |

| | | |
|---|---|--|
| | | <p>DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.</p> |
| <p>Mesa 3-D graphics library Version: 7.0</p> | <p>/</p> | <p>Copyright (C) 1999-2007 Brian Paul All Rights Reserved. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:</p> <p>The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.</p> <p>THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL BRIAN PAUL BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.</p> <p>Copyright (c) 2007 The Khronos Group Inc.</p> <p>Permission is hereby granted, free of charge, to any person obtaining a copy of this software and/or associated documentation files (the "Materials"), to deal in the Materials without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Materials, and to permit persons to whom the Materials are furnished to do so, subject to the following conditions:</p> <p>The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Materials.</p> <p>THE MATERIALS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN ARRIRAW Converter 4.0.0.0 Beta CMD – Release Notes Page 7 of 7 AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE MATERIALS OR THE USE OR OTHER DEALINGS IN THE MATERIALS.</p> |
| <p>OpenEXR</p> | <p>www.openexr.com</p> | <p>Modified BSD License: Copyright (c) 2002-2011, Industrial Light & Magic, a division of Lucasfilm Entertainment Company Ltd. All rights reserved.</p> <p>Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form</p> |

must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. Neither the name of Industrial Light & Magic nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.