AMIRA & ALEXA SXT / SXT W / LF / Mini
ARRI META Extract 4.0.0.0 Beta (GUI)

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1 Introduction

ARRI META Extract (AME) 4.0.0 is a utility to retrieve the static and dynamic camera metadata from ALEXA LF SUP 4.0, ALEXA SXT 2.0, ALEXA 65 SUP 2.0, ALEXA Mini Sup 5.0 and AMIRA SUP 5.0

2   System Requirements

Mac Systems:
- OS X 10.11
- 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

Linus Systems:
- 64 bit Ubuntu 16.04.6
- 64 bit Ubuntu 18.04.2

3 Supported Input Formats

- ALEXA - QuickTime/ProRes
- ALEXA - MXF/DNxHD
- ALEXA & ALEXA 65 - ARRIRAW
- DPX files rendered with ARRIRAW Converter 3.x and higher
- AMIRA – QuickTime/ProRes
- ALEXA Mini - QuickTime/ProRes
- Open EXR files renderd with ARRIRAW Converter 3.x and higher
- ProRes files renderd with ARRIRAW Converter 3.x and higher

4   Feature Overview

New AME 4.0.0 features

- Creation of 3D LUT formats with OpenColorIO (OCIO)
  No further Python dependencies.
   Supported 3DLUT Formats with OCIO:
  – Iridas
- Metadata extraction for CODEX HDE format (High Density Encoding)
  Checks HDE packed .arx data with CRC checksum.
- New output format XMP
  The AME GUI version can be used to extract metadata in XMP.xml format.

Bugfixes

Fixed: Drop Frame Time Code. Automatically detection of Drop Frame TC and Non Drop Frame TC.

AME 3.4.5 release

- Support of new input file formats:
  ARRIRAW 16by9 3.2 files recorded with ALEXA SXT SUP 1.0.
- Extracting ARRI Look File 2 (ALF-2)
  The new ALF-2 Look file format (3D LUT with CDL grading values) can be extracted from ALEXA SXT ARRIRAW and ProRes files as .aml look file.
- New metadata fields for ALEXA Mini files.
  - Noise Reduction Mode (NRI03) in SXT ARRIRAW clips
  - Noise Reduction Strength (NRI04) in SXT ARRIRAW clips
  - Noise Reduction applied (NRI05) in SXT ARRIRAW and ProRes clips

AME 3.4 release

- Support of new input file formats :
  - MXF/ARRIRAW files recorded with ALEXA Mini SUP 4.0 and higher
  - ProRes files rendered with ARRIRAW Converter 3.4 and higher
  - Open EXR files rendered with ARRIRAW Converter 3.4 and higher
    OpenEXR files and ProRes clips rendered with ARC GUI or CMD version 3.4 containing the original ARRIRAW camera metadata information as well as ALF-2 Look information.
- Extracting ARRI Look File 2 (ALF-2)
  The new ALF-2 Look file format (3D LUT with CDL grading values) can be extracted from ALEXA Mini ProRes and MXF/ARRIRAW files and AMIRA ProRes files as .aml look file.
- Extracting of audio wave files from MXF/ARRIRAW clips with audio tracks
- New metadata fields for ALEXA Mini files:
  - Recorder Type (CDI30) only for MXF/ARRIRAW clips
  - Active Image Left offset (IDI06-1)
  - Active Image Top offset (IDI06-2)
  - Active Image Width (IDI06-3)
  - Active Image Height (IDI06-4)
  - Full Image Width (IDI07-3)
  - Full Image Height (IDI07-4)
  - Lens Squeeze (ICI18)
  - Look Modified (ICI38-3)
  - Look Target Color Space (ICI34-10)
  - ND Filter Type (LDI07-1)
  - Frame Line File 1 (FLI03)
  - Frame Line Rectangle Frame Line 1A (FLI05) struct
  - Frame Line Rectangle Frame Line 1B (FLI06) struct
  - Frame Line Rectangle Frame Line 1C (FLI07) struct

AME CMD 3.3 release

- New metadata fields for ALEXA image data checksum:

  When CRC Check bottom is ticked the checksum will be verified during the metadata extraction. Image Data CRC = OK > A checksum is available (only in SUP 11 with ALEXA XT) and verification was successful.
  - Image Data Checksum (ICI42)
  - Image Data CRC (ICI43)

- New metadata fields for ALEXA Frame Lines:

  In SUP 11 is it possible to store the metadata from up to 6 frame lines in the file header of ARRIRAW, QT and MXF ALEXA files. As frame line can be used the camera internal frame lines (ARRI 1.33 / ARRI 1.66/ ....) or the frame line .xml files from the new ARRI Frame Line Composer 3. (AFLC 3) http://www.arri.com/camera/alexa/tools/alexa_frameline_composer/
  One frame line xml from the AFLC 3 can keep up to three different frame line aspect ratios (Format A/B/C).

  When the xml file is loaded into the ALEXA camera as Frame Line 1 (FLI03) it creates Frame Line 1A/1B/1C and loaded as Frame Line 2 (FLI04) it creates Frame Line 2A/2B/2C. In the Frame Line Type (FLI05-1) the Frame Line 1A (FLI05) is tagged as "Master" Frame Line.
  - Version (FLI02)
  - Frame Line File 1 (FLI03)
  - Frame Line File 2 (FLI0A)
  - Frame Line Rectangle Frame Line 1A (FLI05) struct
  - Frame Line Rectangle Frame Line 1B (FLI06) struct
  - Frame Line Rectangle Frame Line 1C (FLI07) struct
  - Frame Line Rectangle Frame Line 2A (FLI08) struct
  - Frame Line Rectangle Frame Line 2B (FLI09) struct
  - Frame Line Rectangle Frame Line 2C (FLI20) struct

  Struct for every Frame Line rectangle:
  - Frame Line 1A Type (FLI05-1) struct for 1A/1B/1C/2A/2B/2C
  - Frame Line 1A Name (FLI05-2) struct for 1A/1B/1C/2A/2B/2C
  - Frame Line 1A Left (FLI05-3) struct for 1A/1B/1C/2A/2B/2C
  - Frame Line 1A Top (FLI05-4) struct for 1A/1B/1C/2A/2B/2C
  - Frame Line 1A Width (FLI05-5) struct for 1A/1B/1C/2A/2B/2C
  - Frame Line 1A Height (FLI05-6) struct for 1A/1B/1C/2A/2B/2C

- New metadata fields for AMIRA UTC offset and DST (day light saving time):

  The camera System Image Time is UTC ± UTC offset (- 12:00h to +14:00h) + DST (+1:00h)
  - System Image Time Zone Offset (CDI09-1)
  - System Image Time Zone DST (CDI09-2)

5   Known Issues

- GUI and CMD Windows AME versions will not support checksum validation, is available only Mac OS and Linux
- No ALF-2 Look Custom LUT name available for ARC 3.4.0 processed DPX and OpenEXR files

6 Questions and Contact

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