

**ALEXA LF / ALEXA SXT / ALEXA 65 / AMIRA /
ALEXA Mini
ARRI META Extract 3.5.3 (CMD)**

USER MANUAL

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Table of Contents

1.	Introduction.....	3
2.	Supported Input Formats.....	3
3.	Supported Output Formats.....	3
4.	Getting Started.....	3
5.	How to install Python for OS X.....	5
6.	Known Issues	6
7.	Questions & Contact	6

1. Introduction

ARRI META Extract (AME) 3.5.3 is an utility to retrieve the static and dynamic camera metadata from ALEXA LF SUP 2.0, ALEXA SUP 11, ALEXA SXT 2.0, ALEXA 65 SUP 2.0, ALEXA Mini Sup 5.0 and AMIRA SUP 5.0

2. Supported Input Formats

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

3. Supported Output Formats

- .csv files command -h
- .xml or .aml Look file command -l
- .wave audio files from MXF/ARRIRAW command -a
- crc checksum verification command -c
- range selection command -r
- 3D LUT export from ALF-2 Look -- lutformat

4. Getting Started

The command line version of AME 3.5 offers the same basic functionality as the GUI version, adds a few extra options. It will also read metadata from a single frame, one take/file sequence or several takes/file sequences and recursively processes the input path it is given.

To display the set of available options, run **./ARRIMETAExtract -h**

Options:

- a [--audio] Extract audio (ARRIRAW/MXF only)
- c [--crc] Perform CRC checking (ARRIRAW & ARRIRAW/MXF)
- d [--debug] More console output
- h [--help]
- i [--input] arg Sequence input path, i.e.
 - a directory containing ARRIRAW, DPX, or OpenEXR (*.ari|*.dpx|*.exr)
 - a directory containing QuickTime or Mxf (*.mov|*.mxf)
 - a single QuickTime or Mxf file (.mov|.mxf)
- k [--keys] Display Quicktime keys
- l [--look] Extract look file (when there is look applied)
- lutformat arg Lut Export File Format:
NAME (in quotes) MESHPOINTS COLORSPACE WITHCDL
e.g. --lutformat "AutoDesk Lustre" 33 REC-709 false
- m [--mdvers] arg Force dynamic metadata version
- o [--output] arg Directory for csv output (default: current)
- p [--pick] arg Pick metadata. Available options: [all|basic]
- s [--separator] arg Set separator char, e.g. -s ";", or -s tab for "\\t".
Default is tab

```
-r [ --range ] arg      Select index range, e.g. -r 5-17, or -r first|last
-v [ --version ]       Print version info
-x [ --xml ] arg       Apply metadata settings (AME GUI settings file)
```

```
--- NAME and MESHPOINTS options ---
  Adobe After Effects  16 17 32 33 64 65
    Apple Color        17 33
  Assimilate Scratch   16 17 32 33
    Autodesk           16 17 32 33
  Autodesk Lustre     17 33 65
  Blackmagic HDLink Pro 16 17 32 33
    CORTEX Dailies     17 33 65
      Canon            9 17 33 65
      Cine-tal        16 17 32 33
  Codex Digital        17
    Colorfront         17 33 65
    DFT Luther         17 33 65
  DVS Clipster         17
  DaVinci Resolve     33
  Digital Vision Nucoda 17 33 65
    Eveon Fusion       33
      Filmlight       16 32 64
      Flanders        17
  Foundry Nuke         16 17 32 33 64 65
    Iridas             16 17 32 33 64 65
    Pandora            17 33
  Pomfort Silverstack 17 33 65
    Quantel           17
```

```
--- COLORSPACE options ---
  P3-D60 P3-D65 P3-DCI REC-2020 REC-2100-HLG REC-2100-PQ REC-709
```

```
--- WITHCDL options ---
  true false
```

Examples

Mac OS X terminal:

```
./ARRIMetaExtract_CMD -i /Volumes/Footage/A012C001 -l -o /Volumes/Footage/A012C001
```

Windows command line:

```
ARRIMetaExtract_CMD.exe -i D:\Footage\A012C001 -l -o D:\Footage\metadata
```

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

Examples how to export ALF-2 Look as 3D LUT

The embedded ALF-2 look can be extracted as 3D LUT in several LUT formats and mesh points sizes of all ARRIRAW, MXF/ARRIRAW and ProRes recording formats.

This feature is only for Mac and Windows AME 3.5 CMD version available and Python 3.5 must be installed.

NOTE: please see chapter 5. How to install Python for OS X

For Linux AME CMD versions, please contact digitalworkflow@arri.de.

In the CMD version the 3D LUT export can be defined by additional 4 LUT parameters

```
--lutformat arg > NAME MESHPOINTS COLORSPACE WITHCDL
```

Two command samples:

```
./ARRIMetaExtract_CMD -i /Volumes/Footage/A012C001 -l --lutformat Iridas 33 REC-709 false
-o /Volumes/Footage/A012C001
```

```
./ARRIMetaExtract_CMD -i /Volumes/Footage/A012C001 -l "Blackmagic HDLink Pro" 17 REC-2020
true -o /Volumes/Footage/A012C001
(Note: LUT Format name with space characters in quotes)
```

3D LUT parameter options:

NAME	MESHPOINTS	COLORSPACE	WITHCDL
Adobe After Effects	16 17 32 33 64 65	P3-D60	true
Apple Color	17 33	P3-D65	false
Assimilate Scratch	16 17 32 33	P3-DCI	
Autodesk	16 17 32 33	REC-2020	
Autodesk Lustre	17 33 65	REC-2100-HLG	
Blackmagic HDLink Pro	16 17 32 33	REC-2100-PQ	
CORTEX Dailies	17 33 65	REC-709	
Canon	9 17 33 65		
Cine-tal	16 17 32 33		
Codex Digital	17		
Colorfront	17 33 65		
DFT Luther	17 33 65		
DVS Clipster	17		
DaVinci Resolve	33		
Digital Vision Nucoda	17 33 65		
Eveon Fusion	33		
Filmlight	16 32 64		
Flanders	17		
Foundry Nuke	16 17 32 33 64 65		
Iridas	16 17 32 33 64 65		
Pandora	17 33		
Pomfort Silverstack	17 33 65		
Quantel	17		

5. How to install Python for OS X

To enable the ALF-2 Look 3D LUT export option, ARRIMetaExtract_CMD requires a Python 3.5 runtime located in the in the standard OsX framework path
"/Library/Frameworks/Python.framework/Versions/3.5/Python".

A Python 3.5 installer for OsX 10.x can be downloaded here: <https://www.python.org/ftp/python/3.5.3/python-3.5.3-macosx10.6.pkg>

Two additional python packages come with the release (site-packages.zip).
Unzip site-packages.zip in any directory, e.g.

```
mkdir $HOME/packages
cp site-packages.zip $HOME/packages
cd $HOME/packages
unzip site-packages.zip
```

Add the directory to the PYTHONPATH environment variable:
export PYTHONPATH=\$PYTHONPATH:\$HOME/packages

Now, ARRIMetaExtract_CMD is ready to run.

Please note: Since Python 3.5 is available from various sources, e.g. python.org, macports, brew, etc., depending on your installation, the Python runtime may be located in a path other than
"/Library/Frameworks/Python.framework/Versions/3.5/Python".

In this event, apply the OsX command 'install_name_tool' (from Xcode tools) to change the Python install

name within ARRIMetaExtract_CMD.

If your Python dist is, for instance, in /opt/local/Frameworks/Python.framework/Versions/3.5/Python, then run:
install_name_tool -change "/Library/Frameworks/Python.framework/Versions/3.5/Python"
"/opt/local/Frameworks/Python.framework/Versions/3.5/Python" ./ARRIMetaExtract_CMD
to switch to your python dist.

6. Known Issues

- Extract of Master TC value for project rates > 30fps (only AMIRA) is not consistent with ALE file.

7. Questions & Contact

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