



VERSION 8.0.1.XXX - DEVELOPED BY: AVOLITES MEDIA LTD. POWERED BY: SALVATION (TM)
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GREG, ADAM, OLIE, ALL AT AVOLITES AND YOU. SPECIAL THANKS MARK CALVERT. LETS ROCK!

Media Preparation

VERSION 8.X

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with Additions by Dave Green & Ciaran Abrams

Media Preparation

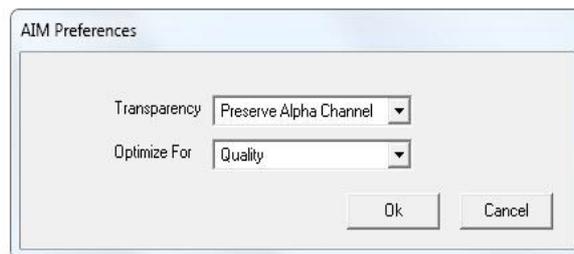
Ai supports many different formats found within the overall Quicktime engine, however for the best performance it is advisable to make use of our own AiM codec as this has been programmed specifically with Ai in mind. An understanding of the features and settings of the codec can help you to get the best performance from your system depending on your project requirements.

Using the AiM codec

Ai's own specialised GPU accelerated codec will give the best playback performance within Ai as the hardware acceleration makes use of the graphics processor to decode the file instead of using the main computer processor as many of the more standard codecs do.

When encoding a media clip to AiM format, regardless of the encoder used, you are presented with a few basic options:

The following image shows the standard codec options for AiM as presented in Adobe After Effects. Whilst the presentation of the control panel may differ in other software, the codec options themselves will be the same in any Quicktime based encoding software.



Transparency: *Discard Alpha Channel / Include Alpha Channel.*

An alpha channel is a special layer within video which marks an area as transparent. Its a little like luma or chroma keying, but instead of removing a specific colour or range of luminosity from the media it removes a predefined section of the image. An alpha channel can only be defined when the video is created or can be added at a later point by editing and re saving the video – it does however need to be done externally of Ai. Not including an alpha channel will reduce the size of the file to a certain extent, but not greatly so.

Optimize For: *Quality / Performance / Superstream*

This setting has the greatest effect on both quality and file size.

Quality is a 24 bit encoding with good colour reproduction which stands up very well against the uncompressed original of the clip it is encoded from. The size of the resulting clip is dependant on the content being compressed. Quality is the option chosen by most

people when encoding to AiM.

Performance reduces the encoding to 16 bit, thereby reducing the file size and data rate of the final clip. Its results are very comparable to the DXV codec which means that for very graphic content its great, but due to the reduced bandwidth, banding artefacts can often be seen in elements such as lighting or real world scenes. The size of the resulting clip is dependant on the content being compressed.

Superstream is the final option in this box and offers the best quality and guaranteed playback performance – it is most suited towards very high resolution playback as it does all image decompression on the GPU. Unlike quality and performance modes, superstream will produce files of a calculable size, it offers a compression ratio of 4.8:1. Superstream is most suited to high resolution footage where very good image reproduction and smooth playback is essential.

Audio

The AiM codec supports audio playback, you can either choose to include or not include the audio within your encoding. If using audio, you should make sure it is encoded at 16 bit, 44.1 kHz. The audio rate is important in Ai – any clip which contains audio as well as video uses the audio to determine the playback speed, so any deviation from those settings will result in your media being played to fast or too slow.

Optimising Files To Reduce Size

Many people concentrate on the final size of their rendered file as the most important thing – this is generally at the expense of image quality and is false economy. Whilst system playback performance obviously has a high consideration, the most important thing should be the final image quality, not whether it uses another 2gb of storage space – storage space can be upgraded, image quality can not.