

# The AiM Codec for Windows and OSX

The Avolites Ai server plays QuickTime movies, but it uses its own special codec called AiM.

The AiM codec is not installed with QuickTime by default, but is free to download from the Avolites website for both Windows and Mac. On this same page you will also find download links for the latest Ai Server software and manual.

After registering on the Avolites website, you can access these files here:

<https://www.avolites.com/software/ai-downloads>

If using Windows, a dedicated installer can be downloaded from the website. This will manually install the Adobe plugin and the QuickTime component. However a download package exists as a zip file. This contains versions for both PC (Windows) and Mac (OSX). Once downloaded, you need to unzip the package and then place the correct version of the codec for your operating system in to the appropriate folder on your computer.

## Adobe AiM Installer

As of April 2018, Adobe have removed support for many Quicktime Codecs – this means that as is, modern versions of Adobe products cannot export AiM encoded video. For this reason, we have created a set of plugins for Adobe products which run on both Windows and OSX and allow AiM based media to be both Imported and Exported with Premiere, After Effects and Media Encoder.

**Note:** The plugins are built for 64 bit version of the Adobe products, which means that you need to be running CS6 or later versions of the relevant Adobe software.

The installer can also be found in the downloads section of the Avolites website:

<https://www.avolites.com/software/ai-downloads>

## PC (Windows)

### Installer

For the PC there is a dedicated AiM installer. Just double click the installer to start and then when prompted, press the button to install. This will create the required folder locations and place the relevant files in those for the programs which need them. This will install the plugins for Adobe CC and for the Quicktime component (to be viewed in QuickTime 7).

The AiM Adobe Plugin Installer is available on the Avolites website from:

<https://www.avolites.com/software/ai-downloads>

### QuickTime Component Manual Install

If for any reason the installer has failed, you can copy the quicktime component into the correct location by following this step:

Copy the file **AIMWin32.qtx** to the folder **C:\Program Files (x86)\QuickTime\QTSystem**

If the folder doesn't exist then you will need to create it yourself.

### Adobe Plugin Manual Install

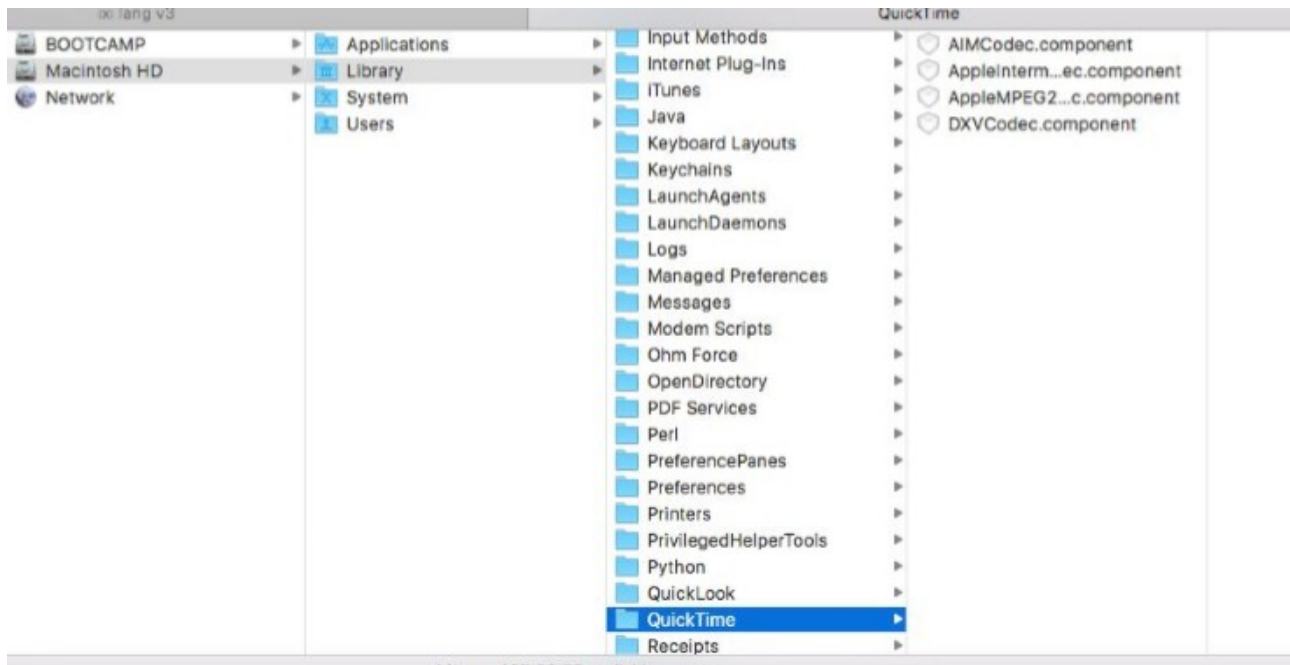
If you need to install the Adobe Plugin Manually, you will need to copy the folder with the import/export plugin to the desired location by following this step:

Copy the folder **Avolites AIM** to the folder **C:\Program Files\Adobe\Common\Plug-ins\7.0\MediaCore\Avolites AIM**

If the folder doesn't exist then you will need to create it yourself.

## Mac (OSX)

Copy the folder **AiMCodec.component** to the folder **/Library/Quicktime** on the hard drive where OSX is installed



Now if you are running OSX 10.7 or later, you may run into a problem.... The user library folder is hidden by default in the 10.7 and later releases of Mac OSX. Therefore, in order to make this folder visible, use one of the following methods:

### Method 1

1. In the Finder, choose **Go > Go To Folder**
2. In the Go To Folder dialogue, type ~/Library
3. Click **Go**.

### Method 2

Hold down the Alt ( Option ) key when using the Go Menu. The User Library folder is listed below the current user's home directory.

**Note:** After you open the library folder, you can drag the library icon from the top of that window to the Dock, Side bar or Toolbar to make it readily accessible

### Method 3

the following method makes the User Library folder permanently visible.

### Method 4

1. In Finder, select your Home / User folder
2. Press Command+J
3. check “Show Library Folder”

**Note:** Adobe recommends that only advanced users use this method.

1. Launch terminal from Mac HD > Applications > Utilities
2. From within Terminal, type the following command and press return:  
**chflags nohidden ~/Library**
3. Enter the system administrator password, if prompted, and press Return.  
**Note:** the System Administrator password is not visible as you type it.
4. Close Terminal for this change to take effect

### Adobe Plugin Installation for OSX

On OSX, it is necessary to manually place the required files in the correct location.

The common plugin location is:

```
/Users/YourUserName/Library/Application Support/Adobe/Common/Plug-ins/7.0/MediaCore/
```

If there are no other Adobe plugins already installed on the system, the **Common** folder might not have a **Plug-ins** folder, in this case the **MediaCore** folder and all the others up to **Common** need to be created.

## Overview of the AiM Codec

We created the AiM codec for Ai having realised the need for high quality image with good temporal reliability and high playback performance.

The Codec is Quicktime based and uses the graphics card to playback the video files – commonly referred to as GPU Acceleration – this allows a much greater amount of video to be processed in realtime, which in turn means you can play bigger files, which look better and are more reliable than many more common codecs.

Regardless of the encoder in us, the Codec has 2 main sections of settings – Video and Audio.

The video settings tab options are:

Optimise for – the options provided here are Superstream, Quality and Performance.

Superstream- Highest quality image and best playback performance.

Quality - Medium quality image, variable file size depending on content

Performance – Produces the smallest files but can suffer on complex imagery

Alpha Channel – this option provides a choice of including or excluding an Alpha Channel in the render. Adding an alpha channel will increase the file size by approximately 33%.

Encode Threads – how many processor threads to use on the initial export of the file

The Audio settings tab options are:

Channels – use a mono or stereo signal

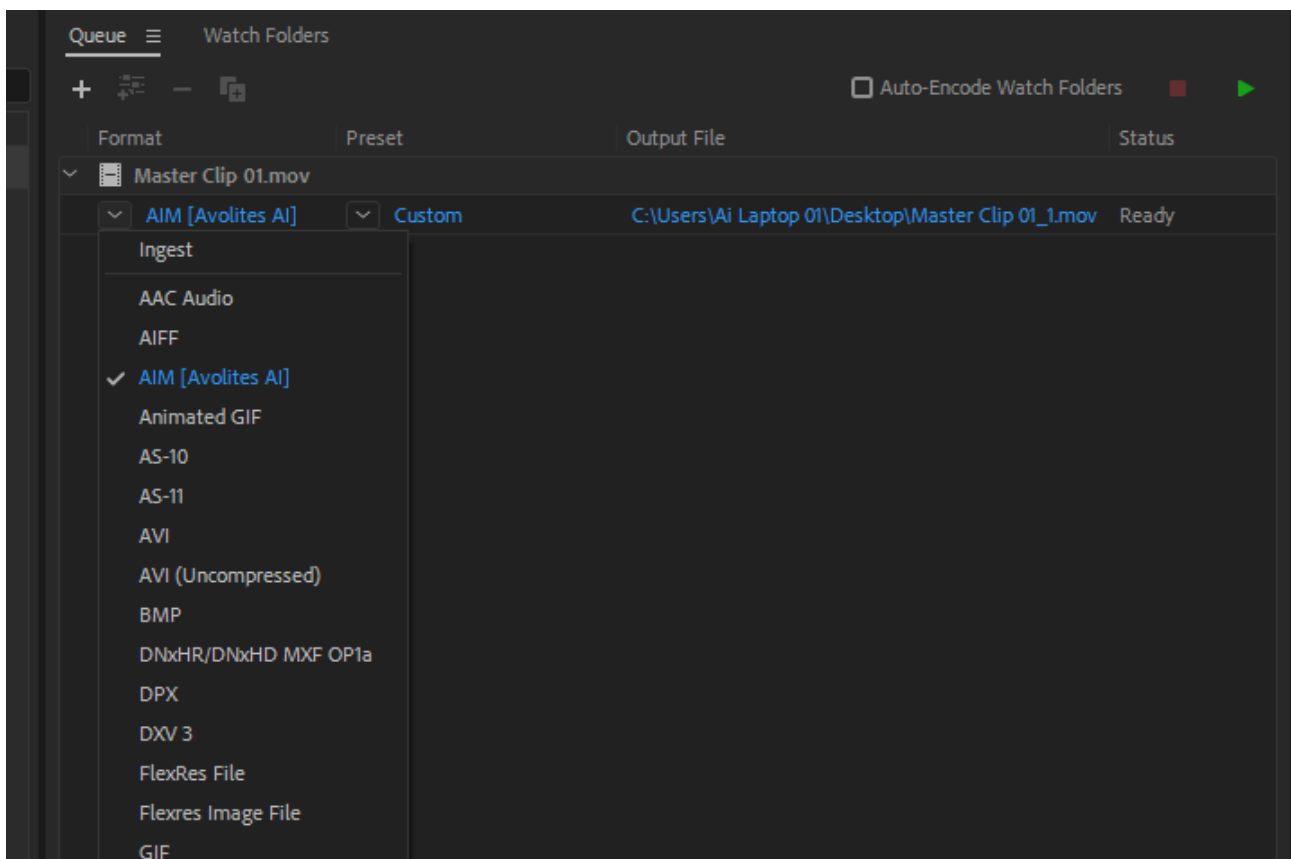
Bit Rate – the higher the bit rate, the greater the detail and dynamic range of the audio.

## Rendering from Media Encoder

First of all we need to select the file we wish to render into the AiM codec. This can be done either by dragging the media from the internal browser or from the windows browser into the Queue window on the right side of the Media Encoder interface or by clicking the + symbol at the top of the Queue window.

Once the file has been selected we need to specify several parameters:  
the codec to use  
the settings for the codec  
the destination to render to

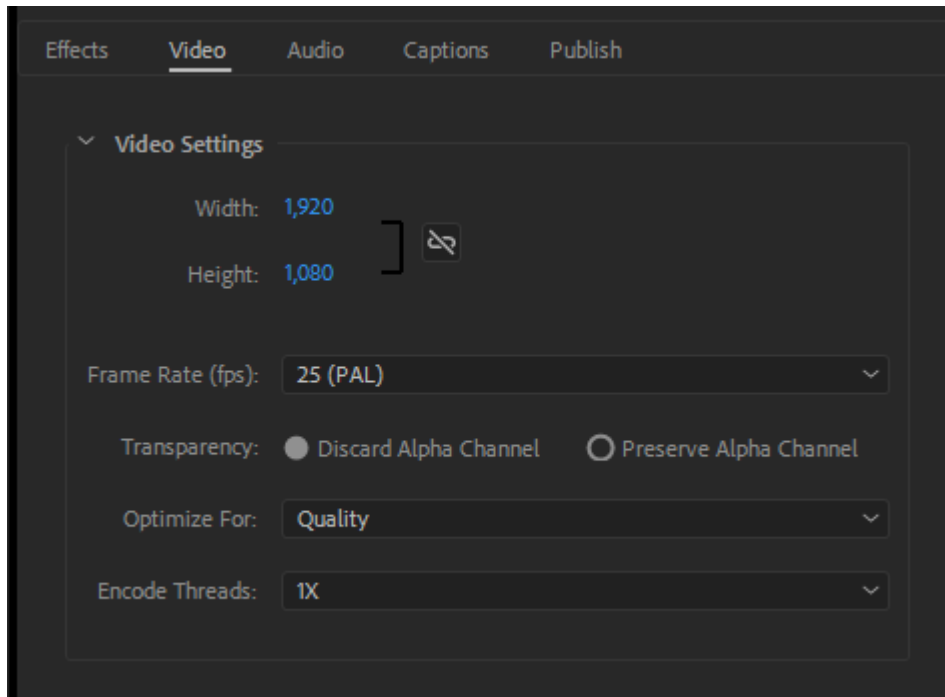
With the file added to the Queue window, we should now see 3 fields - the first two which both have drop downs are for Format and Presets and the third allows us to specify the destination for the file. Before we can choose the fine settings for the file, we need to first specify that we want to use the AiM codec. To do this, click on the first field and in the list that appears, choose AIM [ Avolites AI ]



Now that we have specified AiM as our codec type, we can set the finer details for the render – to do this, left click on the field which now shows AIM [ Avolites AI ]

In the Export Settings Window which has now opened, on the right side, we can see 2 main sections – the top one entitled Export Settings confirms the details of the render type we specify and lets us then create presets for later recall and the second section offers several tabs which allow us to fine tune the video and audio settings to our precise requirements.

## Video Settings Tab



Width and Height specify the horizontal and vertical pixel count to render to. By default these values are not locked together so you can freely enter any resolution and aspect ratio that you want, however, should you wish to play safe and make sure the aspect ratio is retained, then you can click the link icon to the right of the resolution so that it is not crossed out.

Frame Rate lets you specify the amount of frames per second to be used in the final render.

Transparency lets you choose whether to include an Alpha Channel within the file.

*Note:* including an alpha channel increases the overall channel count to 4 ( RGBA ) within the file, so it can be expected to be around a third larger than a similar file with no Alpha Channel.

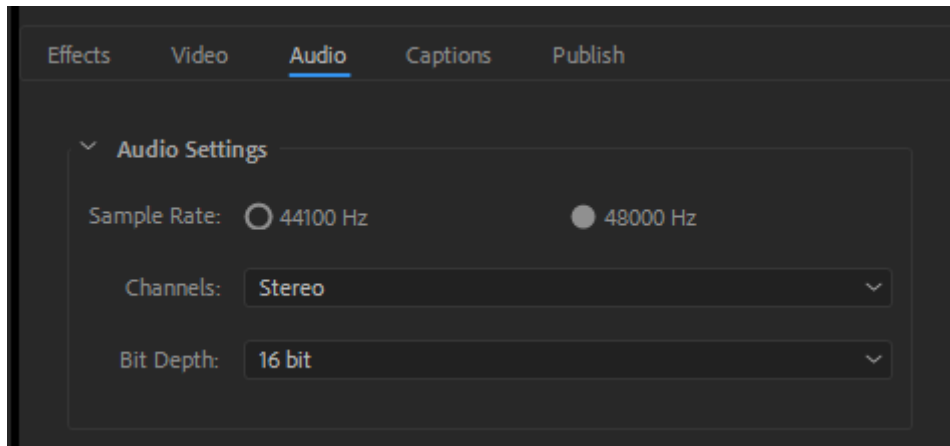
Optimise For is an important setting which determines the level of compression applied to the file which can affect both file size and image quality :

|             |  |
|-------------|--|
| Superstream | Highest quality image, but the largest file size                       |
| Quality     | Good quality image with a variable file size                           |
| Performance | Smallest file size but can suffer image degradation on complex imagery |

*Note:* whilst Superstream produces larger files, due to the way the data is stored it requires very little decompression for playback and providing you have the storage space to accommodate the files, it will generally perform better than the other versions of AiM and is very reliable in terms of temporal playback.

Encode Threads lets you specify how many CPU threads you wish to dedicate to the initial render – the more you use, the quicker the render. Some advanced users like to specify certain amounts when performing multiple tasks at the same time.

## Audio Settings Tab



Sample Rate lets you set how many audio samples are included for every second – two options are available here, 44100 Hz and 48000Hz

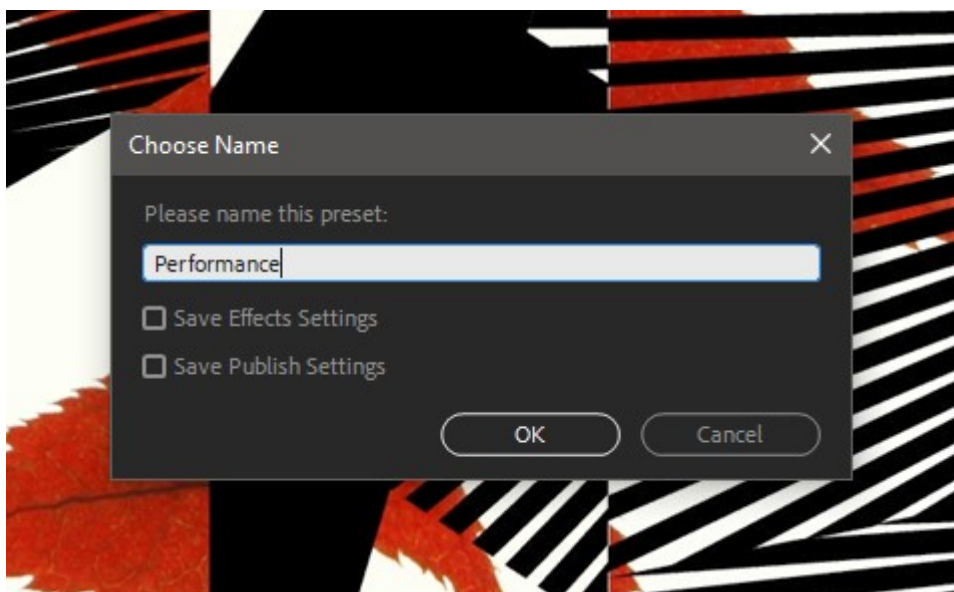
Channels lets you state whether the signal in use is Mono or Stereo.

Bit Depth lets you set the Bit Rate for the file. The higher the Bit Rate, the greater the Dynamic range of the audio in the file.

*Note:* For reference, the standard settings for CD quality audio are 44100 Hz @ 16 bit

## Save A Preset

Once you have adjusted the various video and audio parameters to suit your project you can simply press the OK button at the bottom right of the window to accept the settings. However, if you wish to regularly use these settings for other exports, it may be worth saving them as a preset instead of recreating them every time. To do this, at the top right of the Export Settings window, next to the Preset dropdown, click on the save icon and in the window which pops up, enter a name for the preset and then press enter to save the preset.





## Ready To Render

If you want to add more jobs to the Render Queue, now is a good time – add them in, choose the Codec on the first dropdown, choose a preset on the second dropdown ( if you saved one ) and specify the output name and destination in the third field.

When the list is built to contain all of the jobs you wish to render, all that needs to be done now is press the green Start Queue Button at the top right of the window.

You will see progress indicators within the bottom right section of the screen as well as previews so that you can see where you are in your render.

## Rendering From Adobe Premiere

Setting up a render from Adobe premiere is very similar to setting up Media Encoder render jobs and gives us the same options, however the job setup is a slightly different process depending on whether a single file is being rendered or a group of media needs to be converted

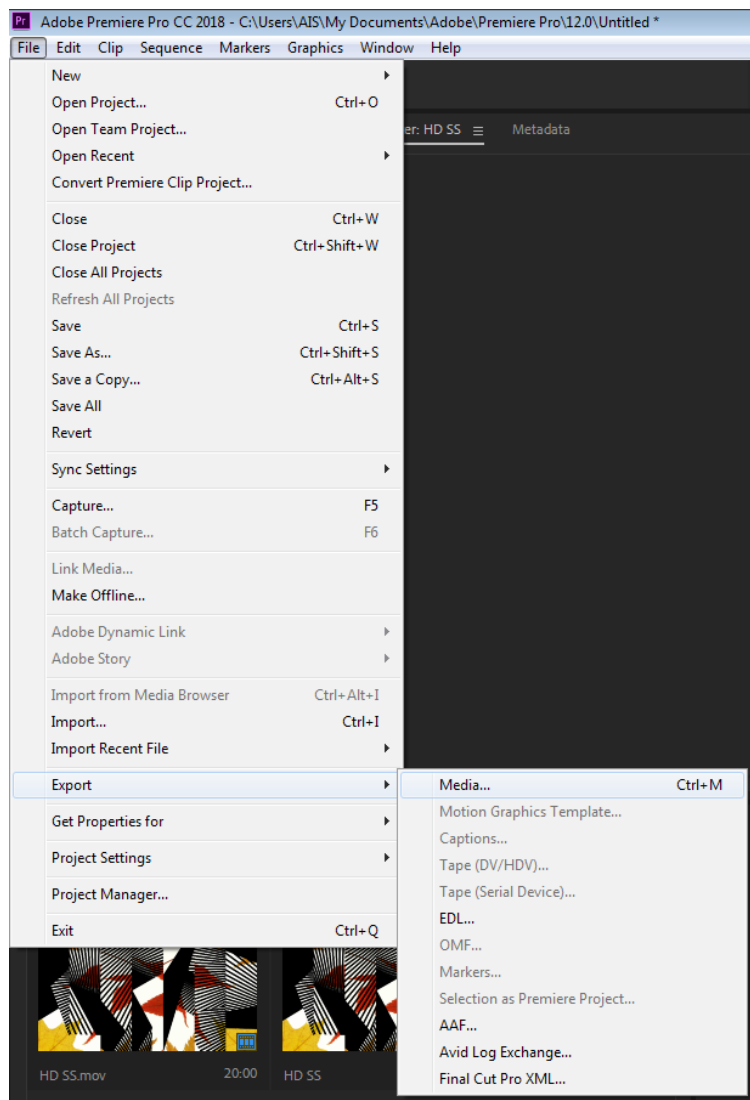
### Rendering a single media file.

To render a single media file out from a timeline created in Adobe Premiere is a simple process.

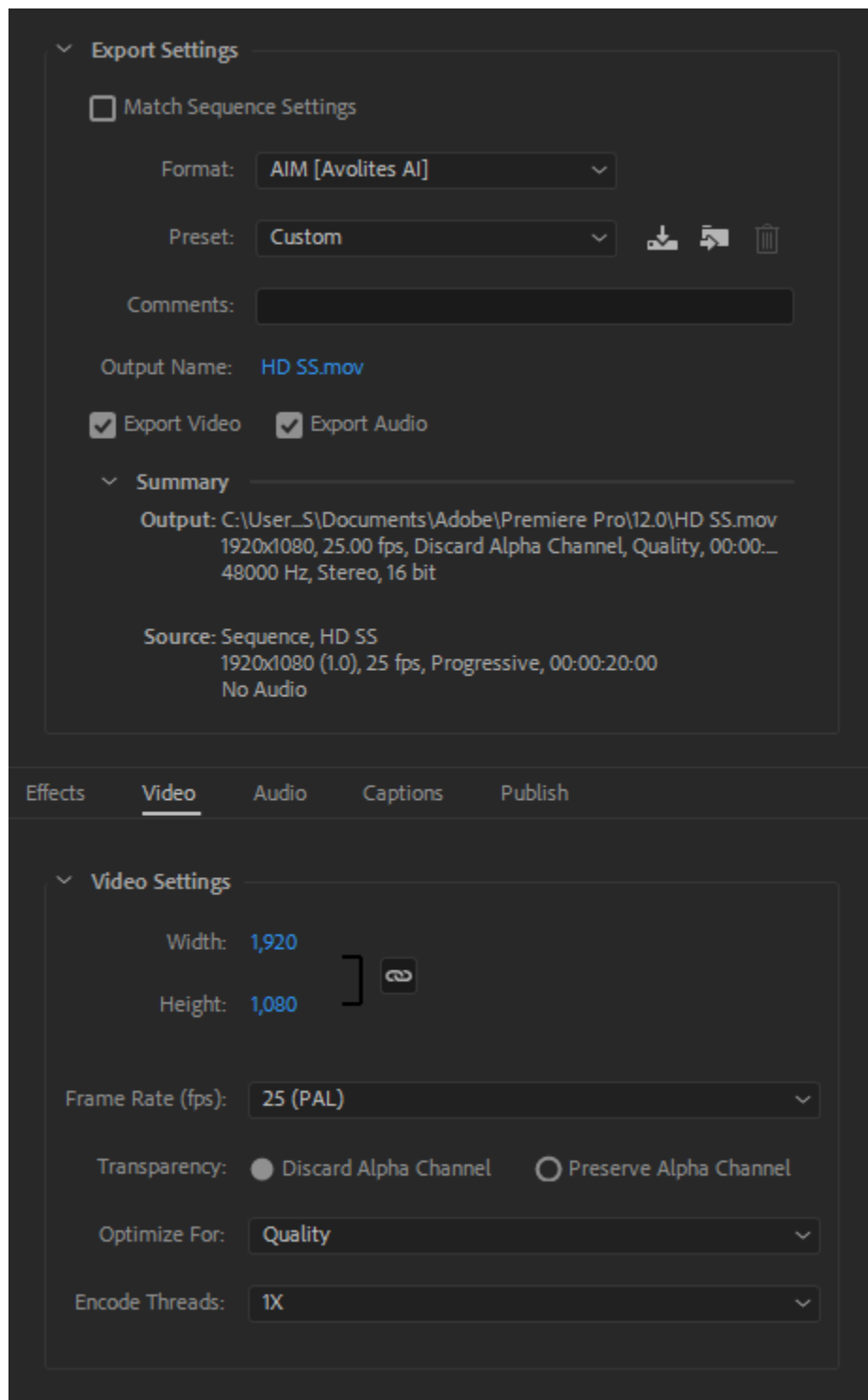
First of all, make sure the timeline window is selected within Premiere.

Next, go to the top menu bar of the software and select

**File > Export > Media...**



The window which now appears looks very similar to the Media Encoder window and provides the same set of options in terms of format, frame rate, codec, resolution and audio settings. Once these have been set as required the render can be started either directly from Premiere with the **Export** button or it can be added to your Media Encoder Queue with the **Queue** button.



As with Media Encoder, you will notice that it is possible to both save and recall presets via this window which can greatly save time if you regularly render video from Premiere.

## Rendering Multiple Files From Premiere

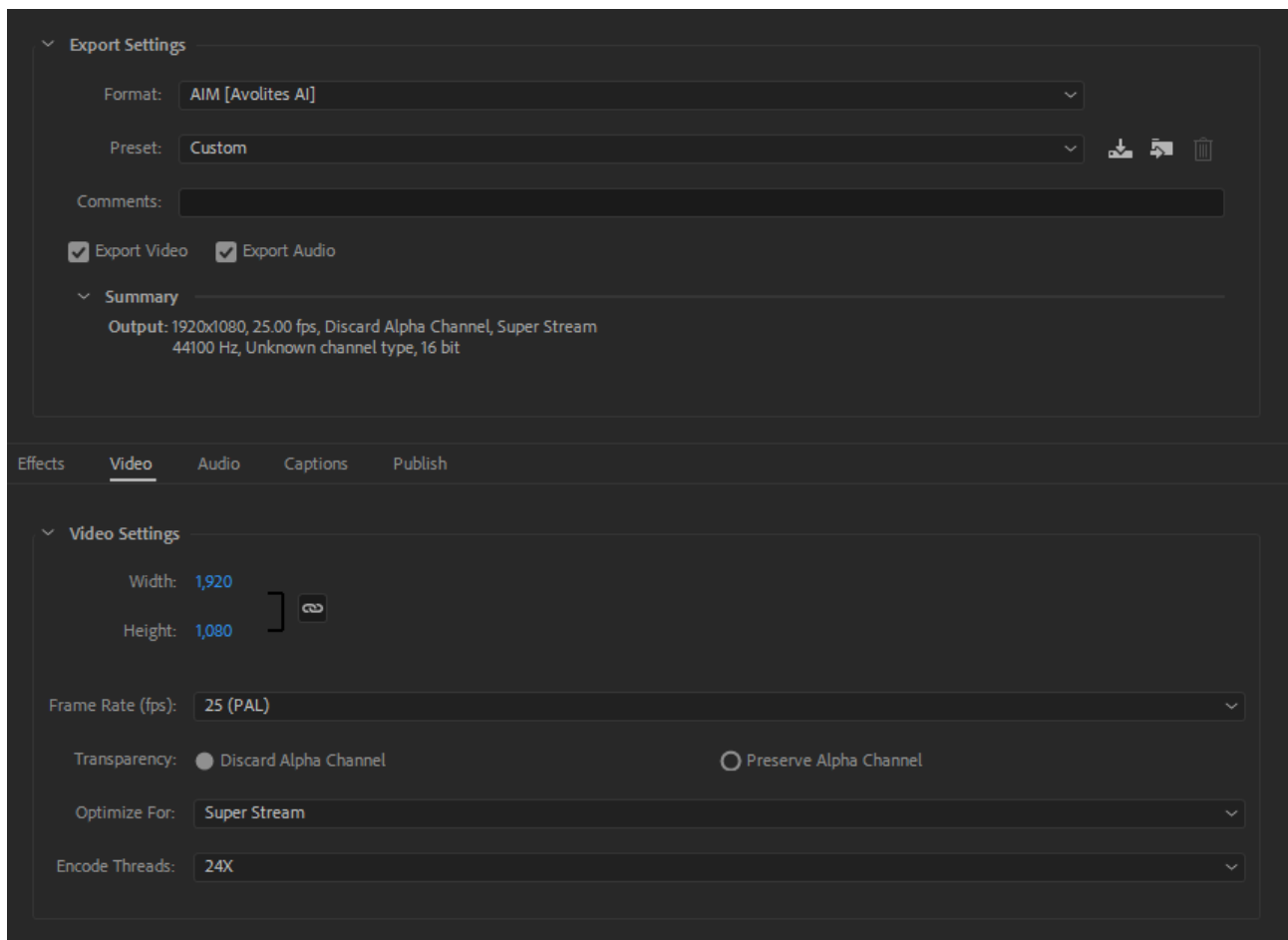
If you want to add multiple files to your render queue at once, you can either add them individually using the previous method or you can add them all at once and apply the same overall settings – again, another time saver if you have a lot of files to process.

This time, we need to first select either the project browser or the media pool in premiere – whichever contains the media you wish to export.

Now multi-select the files you wish to choose for export, return back to the menu bar at the top of the software and go to:

**File > Export > Media...**

The next window we are presented with is slightly different to the others we have seen, but still contains the same basic information and settings for the render. Again we can also save or recall presets for the render.

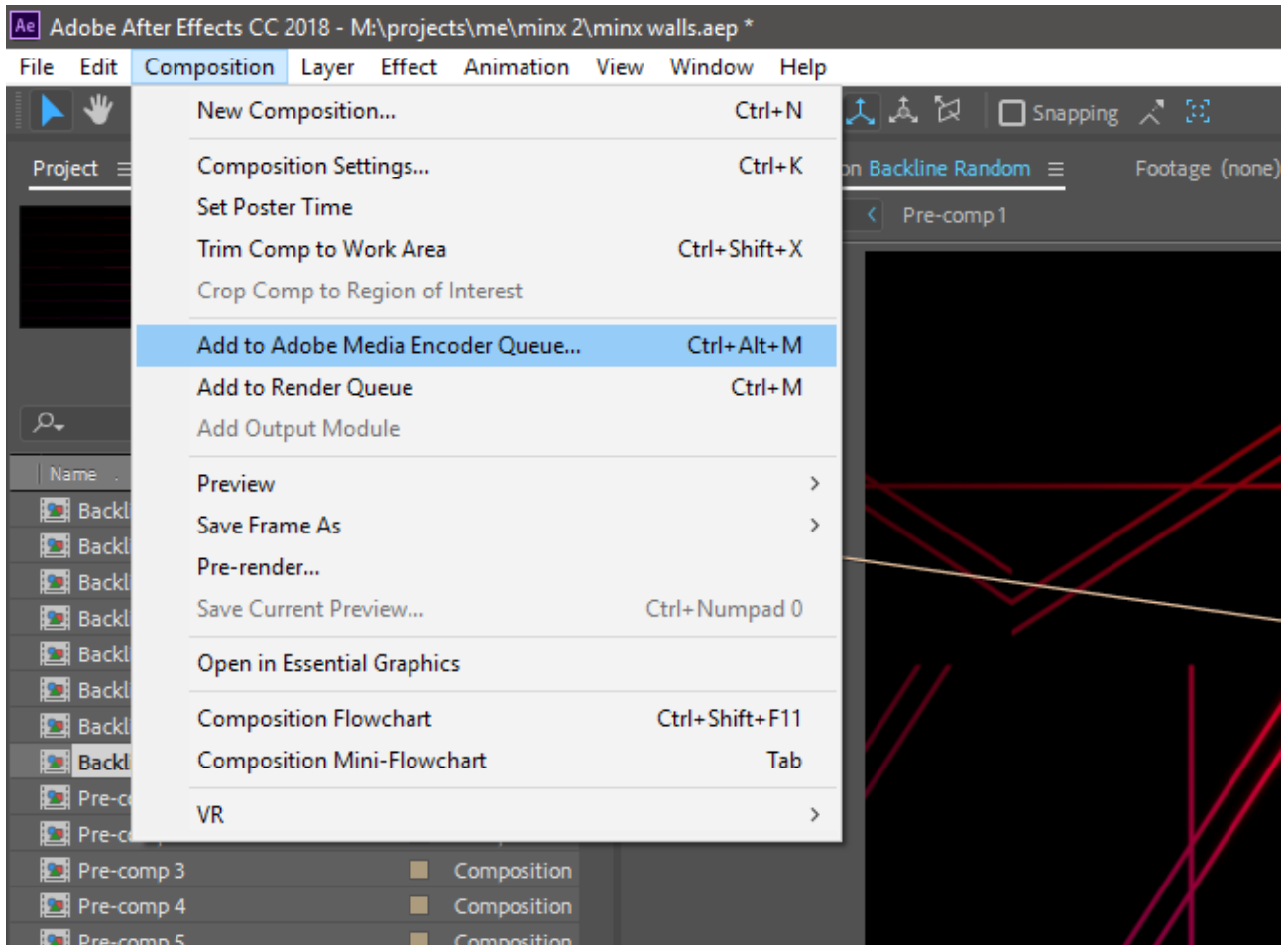


When everything is set as required, all that is left is to press the **Queue** button, then all of the selected files or projects will be added to the Media Encoder Queue with the settings that have just been specified.

## Rendering from Adobe After Effects

Exporting AiM files when using Adobe After Effects requires the use of Adobe Media Encoder, which is free to all Adobe users.

When your project is ready to render, all you need to do is go to the Composition Menu on the top bar and from the menu choose **Add To Adobe Media Encoder Queue...**



Now go back to Media Encoder, and you can see your project has been added to the Render Queue Window. You can now specify the type of render and output as per the instructions in the Media Encoder section of this manual.