Pro Import After Effects® User Guide

About Pro Import After Effects

Pro Import After Effects was originally developed by Automatic Duck and is now included with Adobe® After Effects® CS6. This plug-in imports into After Effects AAF and OMF files from your Avid, XML files from Final Cut Pro 7 and earlier as well as Motion project files.

Using Pro Import After Effects

To use *Pro Import After Effects* you must first export an XML file from Final Cut Pro 7 or earlier, an AAF or OMF 2.0 file from your Avid editing system, or if you're translating a Motion project you can just save the .motn project file.

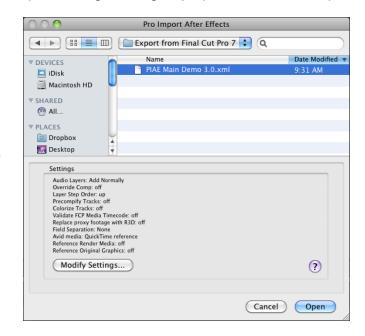
Once you have the file that *Pro Import After Effects* can read importing it is as simple as choosing the file in the *Pro Import After Effects* import dialog, setting any options then let it rip.

How to Import

To access **Pro Import After Effects**, select it from the File->Import submenu, or right-click/ control-click in your project pane and select it from the Import menu.

The upper part of the *Pro Import After Effects* dialog is the file chooser where you select the file(s) you wish to import.

Below the file chooser is a summary of the *Pro Import After Effects* settings. Click the Modify Settings button to change these options.



Settings

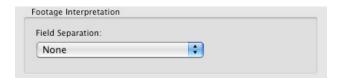
The settings dialog is organized into two tabs, the Footage and Media tab for options dealing specifically with the imported media files and the Comp and Layers tab that has settings for how the composition is created and layers added.

Footage and Media

In After Effects parlance the media that gets imported into After Effects is referred to as footage. In this section of the *Pro Import After Effects* settings you tell the plug-in how you would like it to deal with these footage items.

Field Separation

Sometimes you need to instruct After Effects to separately calculate each field of your interlaced footage, doing so is called Field Separation.

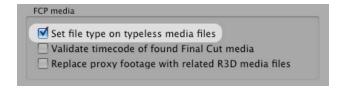


Explaining when you need to do this, or why you need to do this, is outside the scope of this document. After Effects' help has always been a good resource, indeed the writer of this user guide remembers that even though he had

studied broadcasting in college it was the After Effects 3.1 user guide that gave him his first good explanation of interlaced video.

FCP media options

Set file type for typeless media

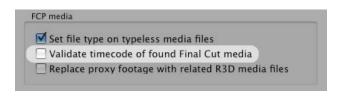


There are two ways for a file to identify to the operating system what kind of file it is, either by having a file extension in the name (everyone knows what a file whose name ends in .doc is) or on the Mac by using a four-character file type that is stored inside the file. If the file type is not set, and the file does not have an extension your

Mac won't know which application to use to open the file, and in the Finder you'll often see files like this identified by a plain document icon or a Unix icon.

Pro Import After Effects offers to set the file type of typeless QuickTime media to "MooV", preventing your import from failing.

Validate timecode of found Final Cut media



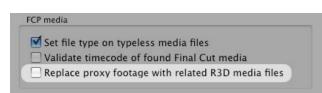
Sometimes customers run into a situation where they have multiple copies of a media file available on their system, each with different durations perhaps due to running clips through FCP's Media Manager. In a case like this when *Pro Import After Effects* searches for media to import into After Effects it is possible to connect

up with the wrong media file, producing undesirable results.

When you enable this option *Pro Import After Effects* will open the candidate media file(s) it finds and verify the start timecode of the file matches what the FCP XML file says it should be.

This does slow down the import somewhat, but if you are in a situation where it is necessary to enable this feature you won't mind.

Replace proxy footage with related R3D media files



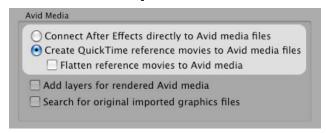
Often you're not editing in Final Cut Pro with original R3D files, but instead with lower resolution proxy QuickTime media created using the Log & Transfer feature. When Final Cut Pro creates this proxy media it also saves into the Final Cut project information about the R3D file from which the proxy was generated. *Pro Import*

After Effects offers you the option to import these R3D files into After Effects instead of the smaller proxy media.

This option only works if you have used FCP's Log and Transfer tool to create your proxy media files. If you create proxies using an outside application Final Cut Pro has no knowledge of the original R3D media files and so this information can't make it into the XML file for *Pro Import After Effects* to do something about.

Since your R3D files are probably larger than your proxy material you will also want to use the Override composition setting preset option.

Avid Media options



After Effects cannot by itself play all Avid media files. The way *Pro Import After Effects* gets around this has always been to "fool" After Effects into playing Avid's OMF and MXF media files via QuickTime reference movies. This generally works well, but there are situations where other options would be more desirable.

The Avid QuickTime Codecs must be installed. You can download them for free from Avid's web site at http://www.avid.com/support/codecs. Be sure to install the latest version.

Connect After Effects directly to Avid media files

When you choose this option *Pro Import After Effects* will assume that After Effects will be able to directly read your Avid's OMF or MXF media files, either all by itself or via a QuickTime component such as those from MXF4Mac and Calibrated Software. *Pro Import After Effects* does not check to make sure After Effects will be able to use the media files directly, it assumes that if you enabled this choice you know what you're doing.

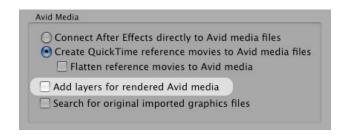
Create QuickTime reference movies to Avid media files

This is the method *Pro Import After Effects* has used to get Avid media into After Effects since the very beginning. It works very nicely but the complex relationship between After Effects, the reference movies and the Avid media files can cause problems when you resurrect an old project or when you need to move a project to another system. However practically no additional storage space is required when you use reference movies, because these pointer files are tiny.

Flatten reference movies to Avid media

Enable this option and *Pro Import After Effects* will create self-contained media files for After Effects. These files are not reference movies and have no dependence on the Avid media files. This obviously requires more storage space, but this option is better for transporting or archiving projects.

Add layers for rendered Avid media

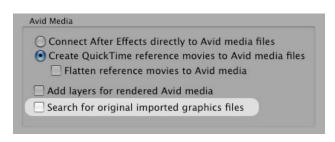


Pro Import After Effects cannot translate most effects from an Avid into After Effects, Avid has always kept the parameters of their effects encoded so third parties couldn't read them. We have decoded some effect parameters such as position, scale and opacity from effects like PIP and Superimpose, but if you have a third party AVX effect applied it will not be translated.

If you have a sweet effect that you created in the Avid and want to bring that into After Effects you can enable this option and as long as you have rendered the effect before you export from the Avid, *Pro Import After Effects* will create a separate layer pointing to the Avid rendered media file.

The original layer is also added to the comp so you have yourself a choice to use the Avid rendered layer, the original layer, or perhaps a combination of the two. It is up to you. The rendered layer's visibility switch is set to off, simply turn it on if you wish to include it.

Search for original imported graphics files



When you import a file into an Avid editing system, it creates new OMF or MXF media to edit with. Depending on the setup, the resulting Avid media could be highly compressed and perhaps downscaled so when you bring this sequence into After Effects you might prefer instead to use the original graphics files you originally imported into the Avid.

When you have this option enabled *Pro Import After Effects* looks in your AAF file for information your Avid stored about the media file (like a .mov) that you imported into your Avid. This original file is then searched for, not the MXF media file your Avid created as a result of your file import.

Do not search these volumes



Pro Import After Effects spends a lot of time searching for media files. This is because the file path stored in the Final Cut XML file is no longer valid or in the case of an Avid OMF or AAF there may only be hints about where to find

the media. There may be certain places on your computer, however, that you don't want *Pro Import After Effects* to look in for media.

To keep *Pro Import After Effects* from searching certain volumes enable the checkbox then select the volume name from the popup menu.

Independent of this setting you can also cause individual folders to be ignored by surrounding the folder name in parentheses. For example the folder "(hidden media)" and its subfolders would never be searched.

Custom search paths

Just like you might want to instruct *Pro Import After Effects* to never search certain places you might also want to give the plug-in some priority locations where the plug-in should search for media files. *Pro Import After Effects* will search these locations you add to this list before any other.



This is especially useful on Windows where the plug-in is not able to search the entire system for media files. On Windows the locations *Pro Import After Effects* searches for media are folders named "Avid MediaFiles", "OMFI MediaFiles" or "FCP MediaFiles" located at the root of a volume. If your media is stored in another location use the Custom search paths option to specify the location(s) of your media files.

Comp and Layers

Audio Layers

Final Cut Pro and Avid editing systems express the clips on each track individually, therefore what you think of as one clip containing video and two audio channels actually presents itself as three in the XML, AAF and OMF files. This means that single clip will make three layers in After Effects. You might like that, you might not, but we offer you controls to make you happy either way.



Ignore

Audio clips are ignored with this selection.

Add Normally

When this is selected each audio clip on each track is created as a separate layer in After Effects.

Place in Subcomp

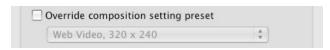
This option helps reduce the number of layers in your main comp and moves all of the audio layers into a nested composition.

Enable on Video Layers

Only applicable to FCP XML imports, this option does not create any audio layers in your After Effects Composition, instead layers that use footage containing audio will have their audio switch enabled as well as their picture.

Override composition setting preset

Sometimes you want your After Effects comp to be setup differently than your editing timeline was set, you can use this setting to override how the new comp is created.



The composition created by *Pro Import After Effects* will match the size and frame rate defined by the selected preset.

Customizing the preset list

Unfortunately *Pro Import After Effects* is not able to read comp presets from After Effects' preferences, so we have built our own XML settings file you can edit if you would like to modify the contents of this menu.

On Mac OS X, you can find the file "ADCompPresets.xml" located inside the plug-in package. Locate your After Effects plug-ins folder. Inside your Plug-ins folder is a "Format" folder, inside there is a "ProImport" folder, and in there you should be a file called "Pro Import AE.plugin". In the Finder, right-click (or hold Control down while click-ing on the package) and a contextual menu will appear. Choose "Show Package Contents" and a new Finder window appears.

Open the Contents/Resources folder and "ADCompPresets.xml" will be in there. Open this file in your favorite text editor. We like <u>TextWrangler</u>, it is free!

On Windows, you can find the "AECompPresets.xml" file located inside the "Supporting Files" folder which should be located at the same location as "Pro Import AE.aex" inside a "ProImport" folder in your After Effects Plug-ins\Format folder. Open this file in a text editor like Notepad.

You will see the presets shown in the XML file plus instructions for how to format additions you make to the file. Just add new lines in the format shown, save the file and relaunch After Effects and you should see your custom setting appear in the list.

Layer step options

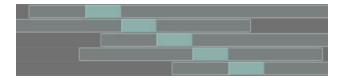
Some users work in After Effects with their clips "stepping up" the timeline, while others prefer to "step down". Which is better? Who knows, but *Pro Import After Effects* gives you a choice.



When Layers step up in comp is selected, layers from earlier in the comp appear lower in the layer order and later clips appear higher. The clips look like stairs going upwards.



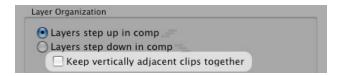
As you would expect, when Layers step down in comp is selected, layers from earlier in the comp appear higher in the layer order and later clips appear lower. The clips look like stairs going down.



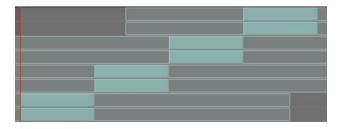
The choice is yours.

Keep vertically adjacent clips together

Historically *Pro Import After Effects* has added clips to the timeline as the plug-in processed clips, first left to right on V1, then left to right on V2, etc. This meant that for a long sequence, a clip on V2 that appeared in your NLE right on top of a clip on V1 would be vertically separated from the V1 clip in After Effects.



The Keep vertically adjacent clips together option reorganizes the timeline so that a clip from V2 will be immediately above its V1 neighbor.



There are rules for how the plug-in decides to do this. The "vertically adjacent" clips must start at the same frame and must have the same duration.

This option only considers video clips, audio clips are not reordered in the timeline.

Precompify layers based on track



While certainly the power of *Pro Import After Effects* is that it builds an After Effects comp with each video clip as a separate layer, sometimes you want the option to treat everything from a

single video track together as one element in After Effects.

When Precompify clips based on track is enabled, all the clips from a track in the AAF/OMF/ XML file are placed into a nested composition.

You can still open the nested comp to edit or apply effects to the individual clips, but in the main comp you will be able to treat the entire track as one element.

Colorize layers using labels

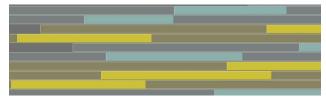


When you bring your edited sequence into After Effects it can at first be a little disorienting to see your clips from your NLE's timeline spread out widely over your After Effects timeline. Not only are clips from the same video track exploded into many individual layers, clips from different tracks can end up far from each other. Any

organization you had in your NLE can be lost instantly. To help visually organize clips from different tracks, there are a couple of options for alternating the label colors of layers.

Alternate label colors based on track

This way all the clips from V1 would be one color, then all the clips from V2 would be a different color, and so on, drawing your eye's attention to the differences in the timeline.



It can be helpful to know at a glance that layers came from different tracks.

Label audio and video tracks separately

This option will color all of the video layers one label color and all the audio layers the other.

What is translated

Pro Import After Effects is able to translate a lot of metadata from your Avid, Final Cut Pro or Motion project into After Effects. Not everything translates, of course, but a lot does.

Translation from Avid editing systems

The following table outlines how *Pro Import After Effects* deals with the supported effects when importing from Avid editing systems.

Supported Effect Translation from Avid		
Avid Effect	After Effects Translation	
Video Dissolve	Opacity keyframes created	
Dip To Color	Color solid created with Opacity animated from 0 to 100 to 0	
Superimpose	Opacity value set to match	
Picture-in-Picture (2D)†	Scale, Position, Level, Crop and Softness translated	
Xpress 3D PIP	Scale, Position, Level, Crop and Softness translated	
3D Warp†	Scale, Rotation, Position, Level, Crop and Softness translated	
Resize	Scale and Position translated	
Flip	Scale set to 100, -100	
Flop	Scale set to -100, 100	
Flip-Flop	Scale set to -100, -100	
Matte Key††	Luma Key track matte enabled	
Submaster	Layers nested into Precomp	
Motion Effects	Layer Stretch set to match speed	
Strobe	Posterize Time filter applied	
Time Warp	Time Remap keyframes set	
Freeze Frame	Time Remap Keyframe set	
X-Spin transition	Animating Scale keyframes created	
Y-Spin transition	Animating Scale keyframes created	
Z-Spin transition	Animating Scale and Rotation keyframes created	
Audio Level and Automation Gain	Audio level keyframes created	

Audio Dissolve	Audio level keyframes created

†Original keyframe model as well as the newer Advanced keyframe model.

†† See Avid Matte Keys section for more information

Effects and parameters that are not supported are not translated, and are therefore lost. Please keep this in mind as you prepare to migrate from your Avid editing system to After Effects.

The following table shows what is translated from Final Cut Pro to After Effects.

Effect and Parameter Support from FCP		
FCP Effect/Parameter	After Effects Translation	
Opacity (Motion Tab)	Opacity	
Scale (Motion Tab)	Scale	
Rotation (Motion Tab)	Rotation	
Center (Motion Tab)	Position	
Distort (Motion Tab)†	Corner Pin	
Crop	Rectangular Mask created	
Speed	Stretch	
Time Remapping	Time Remap Keyframes set	
Freeze Frame††	Time Remap Keyframe set	
Strobe	Posterize Time filter applied	
Distortion > Flop set to Horizontal	Transform Effect applied, Scale set to -100, 100	
Distortion > Flop set to Vertical	Transform Effect applied, Scale set to 100, -100	
Distortion > Flop set to Both	Transform Effect applied, Scale set to -100, -100	
Dissolve	Opacity Keyframes	
Dip To Color Dissolve	Color solid created with Opacity animated from 0 to 100 to 0	
Matte - Color (Key frames not supported)	Solid Layer	
Composite Mode	Transfer/Blending Mode	
Basic 3D	Rotations set Rotations in After Effects, Center and Scale set Position and Scale in Transform effect	
Audio Level and Audio keyframes	Audio level keyframes created	
Audio Dissolve	Audio level keyframes created	

[†] Support for distort does not include "Aspect Ratio."

The following table shows what is translated from Motion to After Effects.

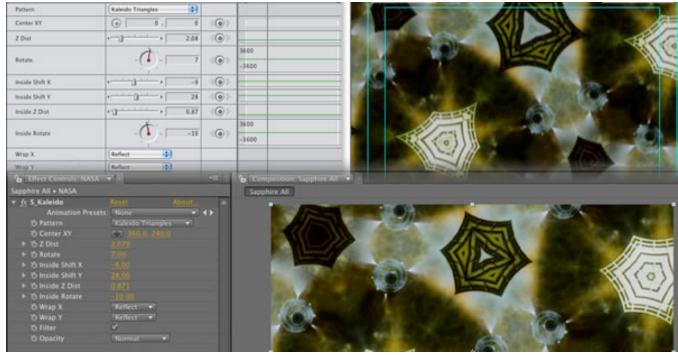
Effect and Parameter Support from Motion		
Motion Effect/Parameter	After Effects Translation	
Opacity	Opacity	
Scale	Scale	
Rotation	Rotation	

^{††} Freeze frames cannot be applied to Nested Sequences.

Position	Position
Four Corner	Corner Pin
Crop	Rectangular Mask created
Media Playback Rate	Playback Rate in Interpret Footage
Perspective > Flop (Horizontal)	Transform Effect applied, Scale set to -100, 100
Perspective > Flop (Vertical)	Transform Effect applied, Scale set to 100, -100
Perspective > Flop (Both)	Transform Effect applied, Scale set to -100, -100
Blend Mode	Transfer/Blending Mode
Audio Level and Audio keyframes	Audio level keyframes created

Third Party Effects

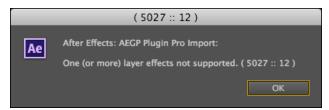
Pro Import After Effects is able to apply many third party filters in After Effects with the same settings used in Final Cut Pro.



If an effect is not translated by *Pro Import After Effects* the plug-in will put a marker on the layer with the name of the untranslated effect.

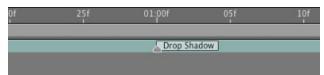
When Effects are Unsupported

Effects and parameters that are not supported are not translated, and are therefore lost. Please keep this in mind as you prepare to migrate from Avid, Final Cut Pro or Motion to After Effects. If your timeline contains elements that *Pro Import After Effects* knows that it cannot translate for you, a warning message will appear.



This warning notifies you that some "effects" are not supported. In the context of this dialog, the term effects refers not only to effect filters, but to any parameter or feature that modifies your clip. In most cases it appears because of unsupported features or filters, not any kind of dramatic failure.

Clip Markers



When *Pro Import After Effects* sees an effect it doesn't know how to translate, it places a marker on the layer with the effect or parameter name in the marker.

Particle Emitters, Replicators, Text from Motion



A particle emitter and text from Motion (left) and how it appears in After Effects (right)

It is not possible for us to convert the Motion particles into particle systems in After Effects, we simply can't take the parameters found in Motion and apply those parameters to any particle plug-in in After Effects.

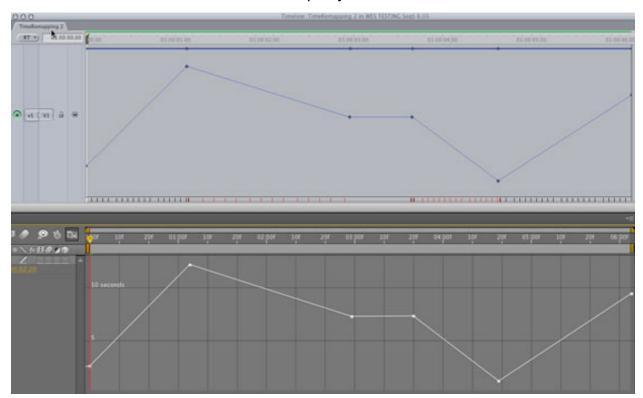
Instead we take a different approach. If a Motion project file is renamed with a ".mov" extension, After Effects can use QuickTime to render the Motion project file as though it was a QuickTime movie. Therefore, *Pro Import After Effects* creates mini Motion project files for particles, replicators, text and other Motion-generated content. This mini project only contains the one element so that its layer in After Effects is discrete and only renders the one element. This allows you to move the element in the After Effects comp.

Motion must be installed on the Mac you're using After Effects on, without Motion installed QuickTime cannot open the mini Motion project files created by *Pro Import After Effects*.

Time Remapping

Time Remapping information from Final Cut Pro and Time Warps from Avid editing systems can be translated into After Effects using *Pro Import After Effects*.

The keyframe values in the FCP time remap keyframes or the Avid time warp keyframes are translated to the keyframe values of Time Remapping in After Effects. Avid editing systems have some pre-built time warp effects that don't rely as much on keyframes as they do on the easing of the timewarp motion curve. *Pro Import After Effects* doesn't deal with these, it only can read the values of the individual time warp keyframes.



An illustration of FCP time remapping going into After Effects. As mentioned in the next section, easing of keyframes is not translated, just keyframe values.

Keyframe Interpolation

Keyframes created in After Effects are default linear keyframes; easing is not supported. Bezier curves in motion paths are also not supported.

Nested Sequences

A powerful feature of Final Cut Pro is its ability to nest sequences inside sequences. After Effects shares this functionality, you can nest comps within comps. *Pro Import After Effects* supports nesting, so your nested sequences from FCP will become nested compositions in After Effects.

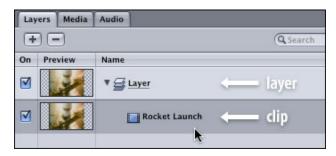
Be aware that audio from nested compositions may not appear in After Effects as you expect.

In Avid editing systems, nesting isn't possible like it is in Final Cut Pro. However some level of nesting is available, where layers can be nested inside of effects such as Picture in Picture.

The Submaster effect is another way nesting is possible in an Avid. When nests are present in an Avid AAF or OMF file, *Pro Import After Effects* will create nested sequences in After Effects.

Nesting from Motion

Motion's architecture is a bit different than that of After Effects, in that every clip is always housed inside of a layer.



Clips are the actual bits that reference content, and the layers are containers that hold the clips. Clips cannot live at the "root level" of a Motion project, only layers can. This is different than After Effects. In After Effects, layers are the same as clips and these layer objects are allowed to exist in the root of the composition. There is no extra level of separation between the layer and the clip.

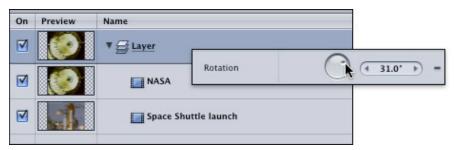
This is important to understand as you work between Motion and After Effects, as *Pro Import After Effects* will try to do what makes the most sense when it comes to dealing with Motion's "extra level".

In many cases, like in the figure below, it doesn't make sense in After Effects to have the separate levels of layer and clip.

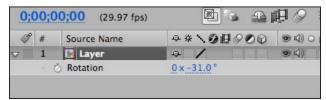


This structure of a layer named "Layer" containing a clip called "Rocket Launch" could easily be recreated in After Effects. You can imagine a comp called "Layer" and that comp contains a layer named "Rocket Launch". But this setup is a bit inconvenient in After Effects, nested comps in After Effects-- while powerful-- can get in the way. So in this example the Motion clip loses its layer-wrapping and becomes an After Effects layer.

In cases where nesting needs to happen, it does. Imagine two clips in a Motion layer, then the layer is rotated.



Visually this causes the two clips within the layer to rotate, so in After Effects we need to have both layers rotate. The best way to convert this example is to create a nested composition in After Effects and apply the rotation to the layer that represents the nested comp.

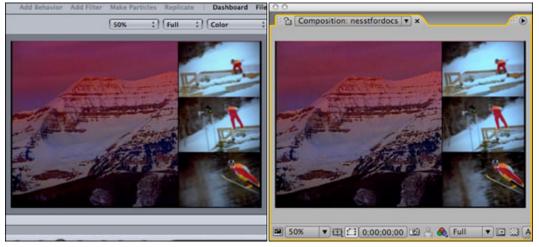


Now you'll see how Motion layer names will want to be changed if they're going to be created nested comps. "Layer" and "Layer 1" and so on just isn't useful, so be mindful of that in Motion when you're setting up your project.

The nested comps from Motion are the result of a lot of complex calculating by *Pro Import After Effects*. Nests in Motion don't actually have any size, they are simply the sum of all the clips (and perhaps even other layers) contained within and the "bounding box" that represents the nest in the Motion canvas is drawn on the fly. Nested comps in After Effects do have a size, however, and *Pro Import After Effects* needs to calculate what that is.

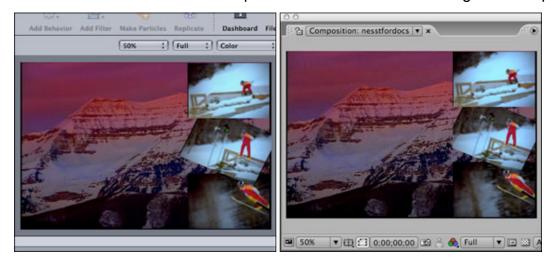
Pro Import After Effects considers Position and Scale when it calculates what the size of the nested comp needs to be.

In the following example, three clips of a ski jumper are nested into a layer and the layer is scaled so the three clips appear on screen together. This creates a nest in After Effects for the three jumpers.



You can see above that the nested composition is created at such a size so that you see all three jumper layers.

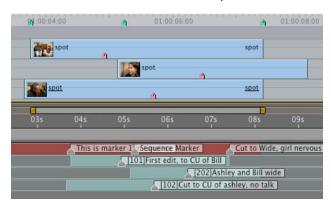
Other parameters in Motion can affect the size the size of the bounding box, but that won't affect the size of the nested comp in After Effects. Rotation is a good example.



As the middle jumper is rotated, the virtual nest in Motion widens, but *Pro Import After Effects* doesn't consider rotation when it calculates the size of the nested comp, so in After Effects the corners of the jumper get cut off. You can easily fix this by changing the comp settings for the nested composition.

Source Clip Markers / Locators

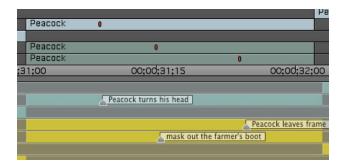
Markers from source clips in FCP sequences are translated into layer markers in After Effects. Both the name and the description fields from the FCP markers are translated.



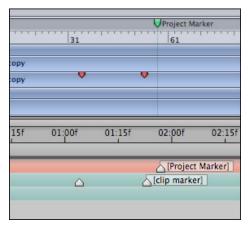
While Final Cut Pro markers have Name and Description fields, After Effects layer markers only have one field for a name/comment. To help keep the Name and Description fields separated, *Pro Import After Effects* inserts "[" and "]" characters around the text that was in the FCP marker name field.

Sequence markers are added to a layer at the top of the comp.

Locators from Avid editing systems are also translated into After Effects markers.



Motion offers markers that can be applied to either clips in the timeline or project. Both kinds translate into After Effects, the markers on Motion clips appear on their translated After Effects layers. Motion project markers appear on a switched off layer at the top of the comp.



Markers are a great way to make comments about clips that need special attention in After Effects.

Text and Titles

Pro Import After Effects is able to read the text from titles created in Avid (Media Composer 10 and later) and Final Cut editing systems then create text layers in After Effects. Text from Motion is translated into a mini Motion project so that the visual results in After Effects match what you saw in Motion.



Pro Import After Effects will attempt to set the font, alignment, color and size of the text in After Effects.

Third party Text Generators like Boris' Title 3D are not supported by *Pro Import After Effects*.

Composite Modes

Pro Import After Effects is capable of translating the composite or transfer mode applied to clips in FCP or Motion.

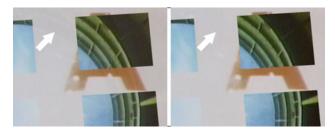
Final Cut Pro "composite modes" become After Effects "blending modes". Motion "Blend Modes" also translate.



Pro Import After Effects is able to read the composite mode setting, and will set the layer in After Effects to the matching mode.

Avid Matte Key

When you bring in Matte Key effects from your Avid system, they will result in Luma Track Mattes. This is good, but what isn't good is that your Avid media is in the 601 color space, so your blacks will be RGB 16 and your whites RGB 235.

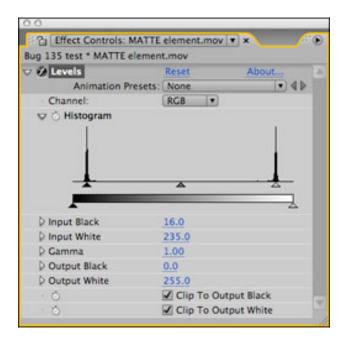


The composite on the left has a bit of the spaceship motor stage bleeding through the next shot (note to the left of the "A" where the arrow is pointing), while the right side is correct.

You will want to adjust the matte layer so that it is in the RGB color space and its blacks are RGB 0 and the whites are RGB 255.



To do this, select your black and white matte layer, then apply the Levels filter from Effect>Color Correction>Levels.



Set the effect so that the Input Black is 16 and the Input White is 235. You can leave the other settings, you want the Output Black to be 0 and the Output White to be 255.

The matte layer will now properly key the video elements involved in the matte key.

Square pixel elements in non-square pixel sequences

Final Cut Pro and After Effects deal differently with the problem of a square-pixel element in a non-square-pixel sequence/comp (and vice-versa). As a result, you will see a visual difference between the Final Cut Pro canvas and the After Effects composition window. You will also receive a warning of an unsupported effect, this is because Final Cut Pro uses the Aspect Ratio control in the Distort section of the motion tab to deal with pixel aspect ratio differences, and Aspect Ratio is not a supported effect.

Color Matte Generators

Only Color Matte is supported of the shape/pattern/color generators available in Final Cut Pro. When a Color Matte is used in a Final Cut Pro sequence, *Pro Import After Effects* translates it into an After Effects solid layer. The color of the color matte generator is carried through and the solid layer matches the color!