INSTANT HD

from RED GIANT

Instant HD User Guide

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Portions of the code used under license.

Product Installation

Welcome

Red Giant Software Instant HD is a new plug-in designed for After Effects-compatible hosts to run on Mac OS X® (10.3 and later) and Windows® XP (Home and Pro editions). Instant HD transforms DV video into a variety of HD video formats. You can choose from a list of preset resolutions to make it easy to integrate DV video into your next High Definition production.

Installation

Instant HD comes packaged as a complete software installer. You must have installed one of the target applications: Adobe After Effects (6.0 and later), Premiere Pro (1.5 and later), or Apple Final Cut Pro 4.5 (and later) before installing Instant HD. The installer will automatically place the required components on your hard drive. The installer will guide you through the process of installing the plug-in.

Activation

The final step in the installation before using Instant HD is entering your serial number into the registration dialog. The registration dialog will appear the first time you access Instant HD. YOU MUST ENTER A SERIAL NUMBER TO USE Instant HD. You will receive a confirmation email after you purchase that contains your serial number.

The serial number for Instant HD appears in the following format:

####

The activation code is a series of 20 numbers. You must enter all numbers to complete the activation.

Support

Product support is available to registered customers only. You can register with Red Giant Software by clicking the link below.

You can also register with us by opening your web browser and using the following URL: www.redgiantsoftware.com/register.html.

The best way to reach support is through email. You can email your support issue to support@redgiantsoftware.com.

The Instant HD Controls

Getting Started

Instant HD is a plug-in product for After Effects-compatible hosts. At its heart, Instant HD is a scaling tool. Scaling is the process of changing an image from one pixel resolution to another. When scaling from standard definition (SD) to high definition (HD), the missing pixels must be generated in an intelligent way. Instant HD provides a high-quality method for converting SD sources to HD within your favorite video application.

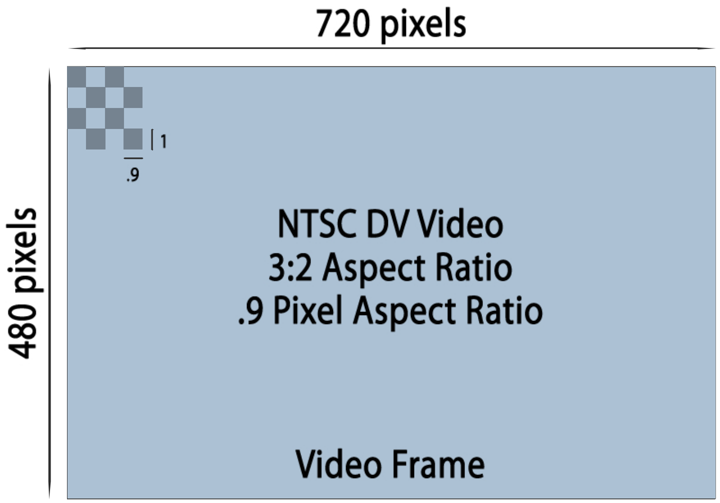
The plug-in has five basic controls: Output Size, Filter Type, Sharpness, Quality settings, and Antialiasing. The plug-ins for After Effects and Premiere Pro work nearly same and share a common set of controls. Final Cut Pro limits the way a plug-in can work so a different workflow and set of controls is presented in Final Cut Pro. We will explain the differences between the host application versions in separate sections.

Note

There is one major limitation in the current Instant HD release. The product is specifically designed to work with progressive (non-interlaced) images. That means that if you are starting with interlaced video such as a standard Sony PD150 DVCAM capture, you will need to convert the image to progressive in the host application before applying Instant HD.

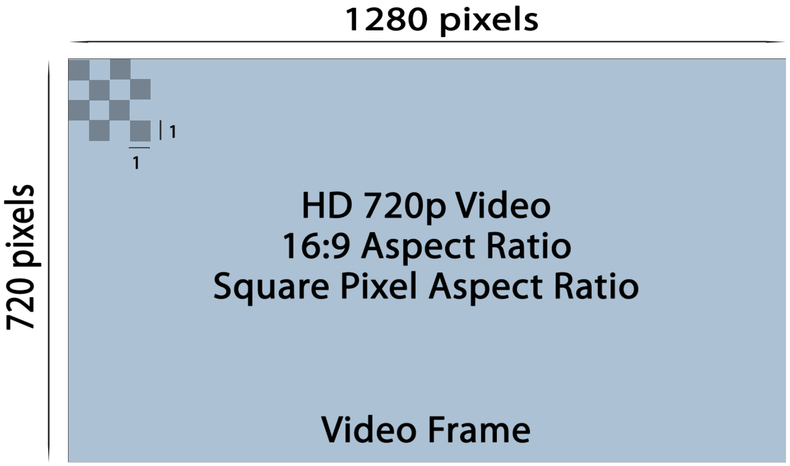
Understanding Aspect Ratios

Before we jump into the Instant HD plug-in controls, we should discuss a little about aspect ratios so that you can get the right results. You may be wondering why you can't just fit a DV video into HD. To convert the video correctly we need to understand the aspect ratio of the source and output. If your source video is NTSC DV, then the image will have a resolution of 720 x 480 and a pixel aspect ratio of .90. The video frame aspect ratio is 3:2. The pixel aspect ratio denotes the ratio of the width to the height of each pixel in the image. With NTSC DV, the pixels are 90 percent as wide as they are tall, making the pixels not squares but rectangles.



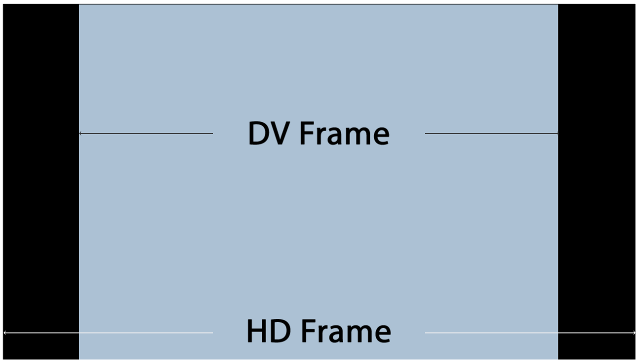
NTSC DV Frame

Now the DV frame needs to fill the space of an HD frame. You can choose between several HD output resolutions. In our case, let's stick with 720p. The following image shows the HD 720p standard frame size.



The HD 720p video frame

So if we look at our DV image scaled to fill the HD frame, we can see that the two won't exactly match.



The NTSC DV frame placed in an HD size frame.

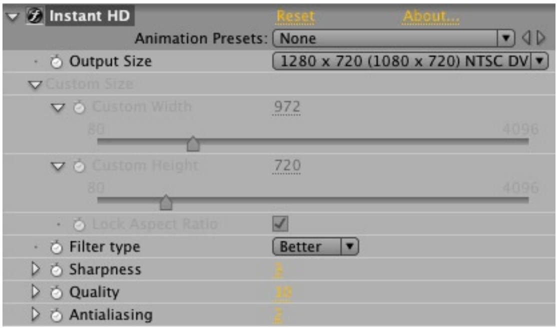
The two images do not match in aspect ratio, so you end up with black bars on either side of the image. These are also called pillar bars, and are normal for inserting a standard DV image into an HD frame.

Let's take a quick look at the math involved to see how Instant HD's default settings in After Effects—1280 x 720 (1080 x 720) NTSC DV/Widescreen— lets you arrive at the right resolution when scaling video from NTSC DV to HD 720p. In After Effects, NTSC DV video is interpreted as 720 pixels wide by 480 pixels high. Now we want to place this video in a HD 720p composition that is 1280 pixels wide by 720 pixels tall. The best way to make these sizes match is to fit by height, which means making the 480 pixels from source stretch to cover 720 pixels in the output. Divide 720 by 480 and you get 1.5, so the NTSC DV video needs to be scaled by 150% to fit a 720p output composition. If we multiply the 720 pixel width of the input video by 1.5, we will get 1080.

Aha! Now you see the resolution of 1080 x 720 in our example above is stretching NTSC DV video to the HEIGHT of the output composition. But the two resolutions don't match—1080 is not wide enough to cover 1280 pixels in the 720p standard, and the outside edges are left black. Why not scale the video to 1280? You do this to avoid stretching the image. Stretching the video to fill 1280 pixels in width would mean scaling the width by 177%. Since this is more that the 150% scale used to fit the height of the video, the output image would look stretched, with circles becoming wide ovals and your actors or talent looking about 30 pounds heavier. You usually don't want that, but if you do, use the Fit to Fill options.

Controls

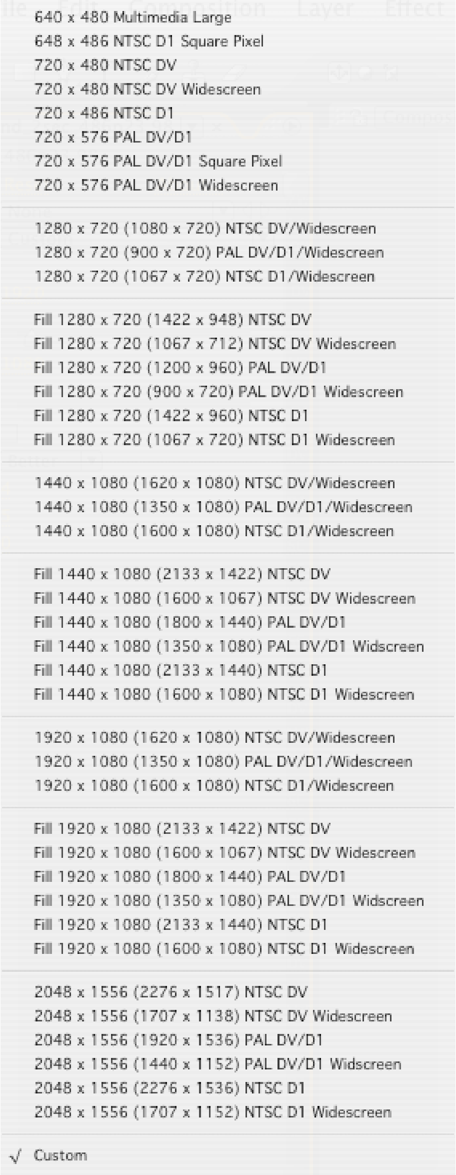
This section will explain each of the controls available in Instant HD. The Output Size control will be described separately for each application because the output differs based on the application's handling of different video formats.



Animation Presets: None
Output Size: 1280 x 720 (1080 x 720) NTSC DV
Custom Size
Custom Width: 972 (80 – 4096)
Custom Height: 720 (80 – 4096)
Lock Aspect Ratio: ☑
Filter type: Better
Sharpness: 3
Quality: 10
Antialiasing: 2

The Instant HD controls in After Effects 7

Output Size. The resolution pop-up lets you quickly choose the output resolution for your video. Typically, the resolution will match the size of the composition in After Effects or a sequence in Premiere Pro or Final Cut Pro. The presets menu has been formatted to reflect the three different parts of the scaling equation: the target output size, the actual resolution applied to the source and the source format. The menu has also been broken into 8 distinct sections to make it easier to choose the right output resolution.

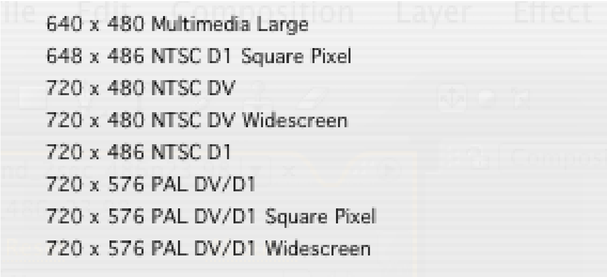

640 x 480 Multimedia Large
648 x 486 NTSC D1 Square Pixel
720 x 480 NTSC DV
720 x 480 NTSC DV Widescreen
720 x 486 NTSC D1
720 x 576 PAL DV/D1
720 x 576 PAL DV/D1 Square Pixel
720 x 576 PAL DV/D1 Widescreen
1280 x 720 (1080 x 720) NTSC DV/Widescreen
1280 x 720 (900 x 720) PAL DV/D1/Widescreen
1280 x 720 (1067 x 720) NTSC D1/Widescreen
Fill 1280 x 720 (1422 x 948) NTSC DV
Fill 1280 x 720 (1067 x 712) NTSC DV Widescreen
Fill 1280 x 720 (1200 x 960) PAL DV/D1
Fill 1280 x 720 (900 x 720) PAL DV/D1 Widescreen
Fill 1280 x 720 (1422 x 960) NTSC D1
Fill 1280 x 720 (1067 x 720) NTSC D1 Widescreen
1440 x 1080 (1620 x 1080) NTSC DV/Widescreen
1440 x 1080 (1350 x 1080) PAL DV/D1/Widescreen
1440 x 1080 (1600 x 1080) NTSC D1/Widescreen
Fill 1440 x 1080 (2133 x 1422) NTSC DV
Fill 1440 x 1080 (1600 x 1067) NTSC DV Widescreen
Fill 1440 x 1080 (1800 x 1440) PAL DV/D1
Fill 1440 x 1080 (1350 x 1080) PAL DV/D1 Widscreen
Fill 1440 x 1080 (2133 x 1440) NTSC D1
Fill 1440 x 1080 (1600 x 1080) NTSC D1 Widescreen
1920 x 1080 (1620 x 1080) NTSC DV/Widescreen
1920 x 1080 (1350 x 1080) PAL DV/D1/Widescreen
1920 x 1080 (1600 x 1080) NTSC D1/Widescreen
Fill 1920 x 1080 (2133 x 1422) NTSC DV
Fill 1920 x 1080 (1600 x 1067) NTSC DV Widescreen
Fill 1920 x 1080 (1800 x 1440) PAL DV/D1
Fill 1920 x 1080 (1350 x 1080) PAL DV/D1 Widscreen
Fill 1920 x 1080 (2133 x 1440) NTSC D1
Fill 1920 x 1080 (1600 x 1080) NTSC D1 Widescreen
2048 x 1556 (2276 x 1517) NTSC DV
2048 x 1556 (1707 x 1138) NTSC DV Widescreen
2048 x 1556 (1920 x 1536) PAL DV/D1
2048 x 1556 (1440 x 1152) PAL DV/D1 Widscreen
2048 x 1556 (2276 x 1536) NTSC D1
2048 x 1556 (1707 x 1152) NTSC D1 Widescreen
√ Custom

The Output Size preset menu

The Output size menu may seem slightly confusing because there are two different numbers that appear in the Preset choice. Let's use the default preset choice as our example— 1280 x 720 (1080 x 720) NTSC DV/Widescreen. The first two numbers are 1280 x 720 one of the standard output resolutions for HD video. The second two numbers in parentheses (1080 x 720 in the default choice) is the correct resolution for converting you DV Video to HD in After Effects and Premiere Pro.

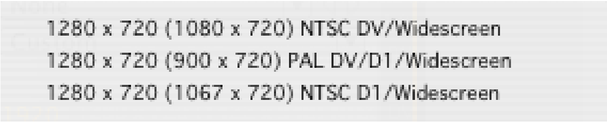
You may now be wondering why these are different. The first is the resolution of your final project, the second is the resolution that represents the correct resolution if you are scaling from NTSC DV or NTSC DV Widescreen source video—as shown in the final part of the menu. All the options that start with an HD resolution, we have created the preset to allow the input video to fit by height. All of the options that start with Fill try to cover the entire output frame with the input. This is referred to as Fit to Fill.

Standard Resolutions. The first section of the output size menu contains the standard definition resolutions. If you are using an image that is smaller than DV, you can choose one of the presets to fit your output size.


640 x 480 Multimedia Large
648 x 486 NTSC D1 Square Pixel
720 x 480 NTSC DV
720 x 480 NTSC DV Widescreen
720 x 486 NTSC D1
720 x 576 PAL DV/D1
720 x 576 PAL DV/D1 Square Pixel
720 x 576 PAL DV/D1 Widescreen

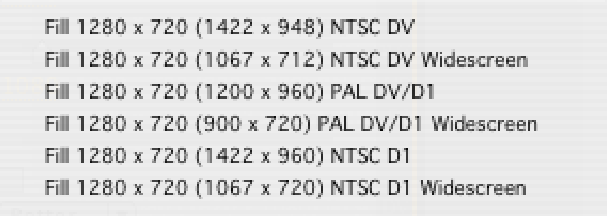
The standard definition resolutions for DV, D1 and PAL.

HD 720p. Section 2 of the menu offers choices for converting between standard definition and high definition 720p resolutions. If you want to scale your input image to match a 720p project and have the height match, then choose from these options.


1280 x 720 (1080 x 720) NTSC DV/Widescreen
1280 x 720 (900 x 720) PAL DV/D1/Widescreen
1280 x 720 (1067 x 720) NTSC D1/Widescreen

The 720p options

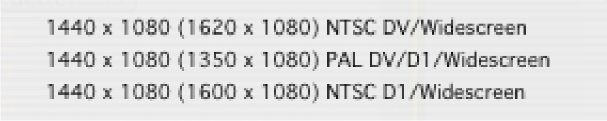
Fill HD 720p. Section 3 delivers options for filling the entire 720p frame with the input video. These are options are referred to as “fit to fill”, because the input image will fill the entire frame. If the aspect ratios do not match, then top and bottom of the input frames will be cropped out of the picture.



Fill 1280 x 720 (1422 x 948) NTSC DV
Fill 1280 x 720 (1067 x 712) NTSC DV Widescreen
Fill 1280 x 720 (1200 x 960) PAL DV/D1
Fill 1280 x 720 (900 x 720) PAL DV/D1 Widescreen
Fill 1280 x 720 (1422 x 960) NTSC D1
Fill 1280 x 720 (1067 x 720) NTSC D1 Widescreen

The Fit to Fill 720p options

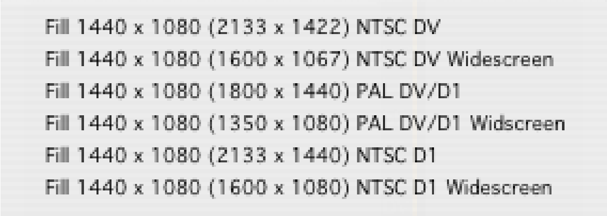
HDV 1440 x 1080. Section 4 offers fit-by-height 1080p resolutions that match the aspect ratio of HDV video. These options are used if you intend to create an HDV output in the native format of 1440 x 1080.



1440 x 1080 (1620 x 1080) NTSC DV/Widescreen
1440 x 1080 (1350 x 1080) PAL DV/D1/Widescreen
1440 x 1080 (1600 x 1080) NTSC D1/Widescreen

The HDV 1080 fit by height output options

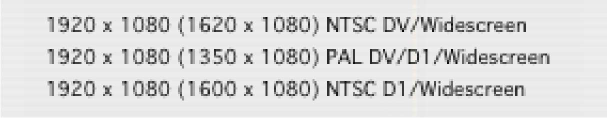
HDV Fit to Fill. Section 5 offers all of the same fit to fill options as found in the 720p section. Applying this option to non-16:9 material will crop the top and bottom of the frame. The widescreen sources (e.g. NTSC DV Widescreen) will fill the entire frame with minimal cropping.



Fill 1440 x 1080 (2133 x 1422) NTSC DV
Fill 1440 x 1080 (1600 x 1067) NTSC DV Widescreen
Fill 1440 x 1080 (1800 x 1440) PAL DV/D1
Fill 1440 x 1080 (1350 x 1080) PAL DV/D1 Widscreen
Fill 1440 x 1080 (2133 x 1440) NTSC D1
Fill 1440 x 1080 (1600 x 1080) NTSC D1 Widescreen

The HDV Fit to Fill options

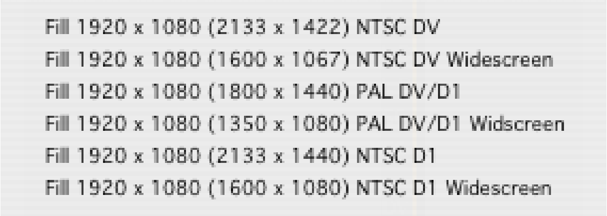
HD 1920 x 1080 . Section 6 offers the fit-by-height options for outputting to 1920 x 1080 output compositions. These scale options are best suited for material that has some native sharpness such as uncompressed video. Scaling DV to 1920 x 1080 can reveal artifacts and noticeable noise in the original.



1920 x 1080 (1620 x 1080) NTSC DV/Widescreen
1920 x 1080 (1350 x 1080) PAL DV/D1/Widescreen
1920 x 1080 (1600 x 1080) NTSC D1/Widescreen

HD 1920 x 1080 fit by height options

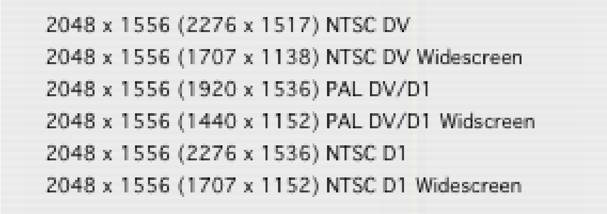
HD 1920 x 1080 Fit to Fill. Section 7 offers all of the same fit to fill options as found in the 720p section. Applying this option to non-16:9 material will crop the top and bottom of the frame. The widescreen sources (e.g. NTSC DV Widescreen) will nearly fill the entire frame.



Fill 1920 x 1080 (2133 x 1422) NTSC DV
Fill 1920 x 1080 (1600 x 1067) NTSC DV Widescreen
Fill 1920 x 1080 (1800 x 1440) PAL DV/D1
Fill 1920 x 1080 (1350 x 1080) PAL DV/D1 Widscreen
Fill 1920 x 1080 (2133 x 1440) NTSC D1
Fill 1920 x 1080 (1600 x 1080) NTSC D1 Widescreen

HD 1920 x 1080 Fit to Fill options

2K Film Resolutions. The last section is reserved for scaling from standard definition sources to 2K film resolution. In many instances this is better left to a hardware devices such as a laser recorder but Instant HD can create these images in case hardware output is not available. All of these resolutions will Fit to Fill the image to the 2K frame size.



2048 x 1556 (2276 x 1517) NTSC DV
2048 x 1556 (1707 x 1138) NTSC DV Widescreen
2048 x 1556 (1920 x 1536) PAL DV/D1
2048 x 1556 (1440 x 1152) PAL DV/D1 Widscreen
2048 x 1556 (2276 x 1536) NTSC D1
2048 x 1556 (1707 x 1152) NTSC D1 Widescreen

The 2K Film Fit to Fill options

Custom Size. In addition, the last item in the Output Size pop-up is Custom. This options allows you to enter custom width and height values in the Custom Size section of the plug-in. The last actual resolution will be shown. If you chose the item above—1280 x 720 (1080 x 720) NTSC DV/Widescreen—you would see the 1080 value appear in the custom width control and the 720 value appear in the custom height. The second numbers in the menu item show the actual resolution of the final output.

The Custom Size control also has a Lock Aspect Ratio check box. When checked, the width and height will change proportionally. This makes it possible to increase or decrease the scale of the image without distorting the original content. This is useful for increasing the zoom on an image without distorting the picture.

Filter Type. There are two quality adjustments in Instant HD. The first is a pop-up menu which lets you choose from four scaling modes: Draft, Quick, Better, and Best. The Draft mode is a bilinear scale similar to a low-quality scale in After Effects and is useful for previewing the size of the output. Quick mode improves the output and is closer to the final result but still renders fairly quickly. The Better and Best modes are very similar. Better will work for most videos and provide improved edges and image contrast. The Best mode can provide the finest results but the Better mode may be more compatible with your processor type.

Sharpness. This control lets you sharpen the output of the video scaling operation. The slider range lets you choose between 0 (no sharpening) and 25 (very sharp). Low values between 2 and 6 are suitable for most operations. High values above 10 can lead to oversharpened images that have ringing artifacts.

Quality. This slider lets you adjust the sampling used in the Filter Type. The slider ranges from 0 to 25. Low values mean fewer samples for each output pixel. High values mean more sample points for each output pixel. A mid-range value usually is good balance between edge smoothness and detail sharpness.

Antialiasing. The final control in Instant HD lets you add smoothing to the edges of images. The slider has a range of 0 to 10. Low values will provide small amounts of smoothing for jagged edges. High values can smooth out small details. We recommend a setting of 1-4 for most images.

Application Options

After Effects

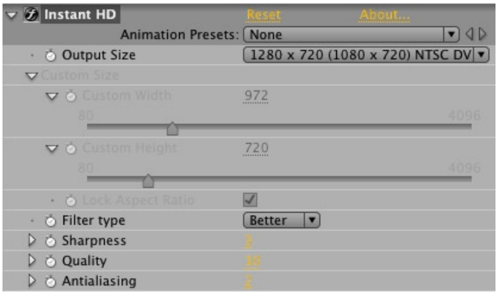
Instant HD appears under the Red Giant category in the Effects menu. The plug-in should be applied after you set-up your composition to one of the HD resolutions. The following is a quick sequence for using Instant HD in After Effects. The menu items covered in the reference section are from the After Effects version, so please see the earlier Controls section for detailed information.

Getting Started

The following is a step-by-step instruction for applying Instant HD in After Effects 7 to scale a DV image to HD. You should have installed the Instant HD plug-in before proceeding.

1. Start by loading a progressive NTSC or DV video file into After Effects by choosing File > Import or double-clicking in the project window.
2. Create a composition of the desired frame size. For this example, choose Composition > New Composition... and a new composition dialog appears.

   Choose the HD preset from the Preset pop-up. Then change the frame rate to reflect your input media. In this case we are using 23.976 DV media, so we set the frame rate to 23.976. Finally, set the duration to match the length of your input source and click 'OK'.
3. Drop your source footage from the Project window into the HD timeline. The source footage will be added to the HD composition and centered in the display.
4. With the source layer selected in the Timeline windows, choose Effects > Red Giant > Instant HD. The effect controls window will appear.



Animation Presets: None
Output Size: 1280 x 720 (1080 x 720) NTSC DV
Custom Size
Custom Width: 972 (80 – 4096)
Custom Height: 720 (80 – 4096)
Lock Aspect Ratio: ☑
Filter type: Better
Sharpness: 3
Quality: 10
Antialiasing: 2

The settings for Instant HD in After Effects

The default setting in the Output size will automatically scale the image to the proper size in the 720p comp. Change the other settings to the following:

Filter Type: Best

Sharpness: 3

Quality: 10

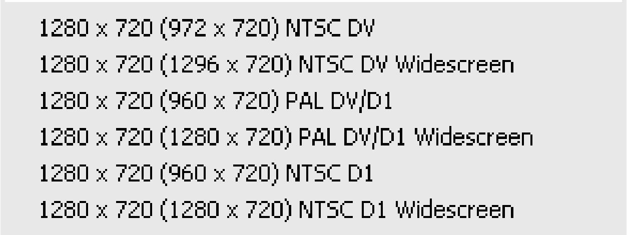
Anti-aliasing: 2

These values represent a good compromise between sharpness and speed.

5. Choose RAM Preview in After Effects to see the results. You should now have a Comp ready to render at 720p frame size. You could alternately choose a 1080 output size from the Output Size pop-up and set your comp to 1080p as well.

Premiere Pro

The Premiere Pro version of Instant HD is nearly identical to the After Effects version. The options and menu items are nearly the same. The only difference is in the Preset menu. Premiere Pro treats the input size for DV standard and widescreen differently than After Effects. To get the right results when choosing to fit-by-height you must specify different presets for DV video and DV Widescreen video.



1280 x 720 (972 x 720) NTSC DV
1280 x 720 (1296 x 720) NTSC DV Widescreen
1280 x 720 (960 x 720) PAL DV/D1
1280 x 720 (1280 x 720) PAL DV/D1 Widescreen
1280 x 720 (960 x 720) NTSC D1
1280 x 720 (1280 x 720) NTSC D1 Widescreen

Part the Premiere Pro Instant HD Output Size options

For each of the Output Size preset options that fit by height, additional presets have been added for Widescreen sources to assure that you get the correct result.

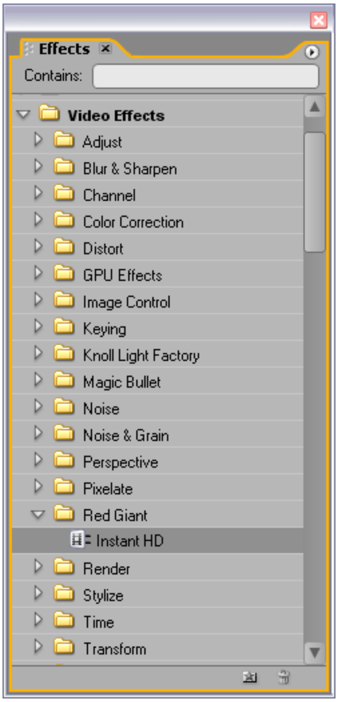
Getting Started

The following is a step-by -step instruction for applying Instant HD in Premiere Pro (1.5 and later) to scale a DV image to HD resolution. You should have installed the Instant HD plug-in before proceeding.

1. Start by creating an HD-resolution project. You can use one of

the HDV presets or create your own. Check with the Premiere Pro documentation if you have questions. For our example, we will use a custom 720p project with a time base of 23.976 (24p).

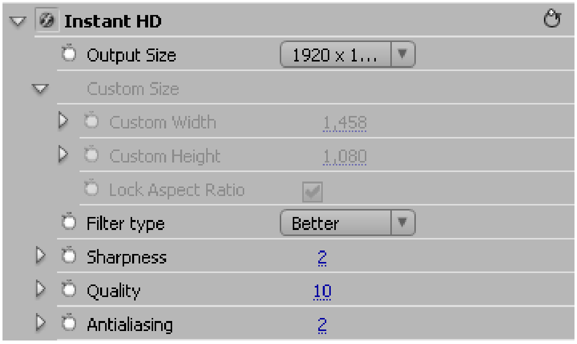
2. After creating a new Project, you will have a sequence in the Project window that matches the Project settings. Import your footage by choosing File > Import or double-clicking in the project window. You can use the Playground_DV_24p.mov movie found in the Instant HD package.
3. Drop your source footage from the Project window into the HD Timeline. The source footage will be added to the HD composition and centered in the display.
4. With the source footage selected in the Timeline, choose Effect > Red Giant > Instant HD or you can drag and drop the Instant HD effect from the Effects tab.



The Effects tab showing the Instant HD effect

5. Highlight the clip and then click the Effect Controls window. The default setting in the Output size will automatically scale the im-

age to the proper size in the 720p comp.



Instant HD

Output Size: 1920 x 1...

Custom Size

Custom Width: 1,458

Custom Height: 1,080

Lock Aspect Ratio: ☑

Filter type: Better

Sharpness: 2

Quality: 10

Antialiasing: 2

The Instant HD controls in the Premiere Pro Effects Control window

Change the other settings to match the following values:

Filter Type: Best

Sharpness: 3

Quality: 10

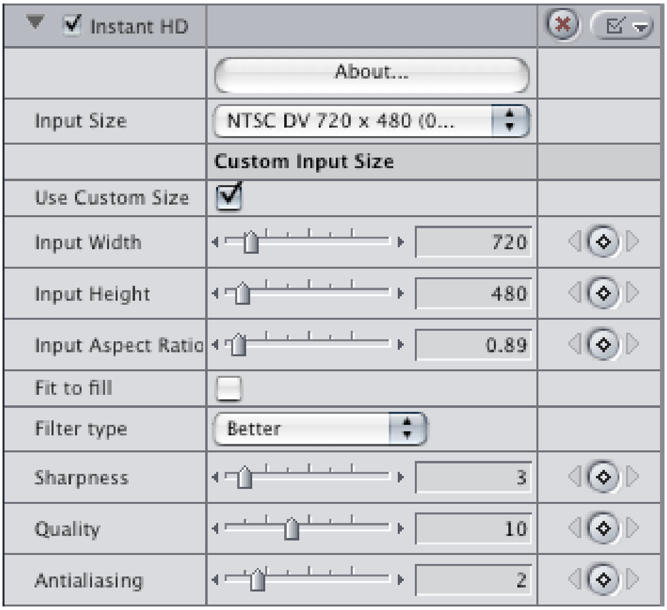
Anti-aliasing: 2

These values represent a good compromise between sharpness and speed.

5. Update the timeline by choosing the Render Timeline option. You can complete the project by choosing to Export the timeline to a file.

Final Cut Pro

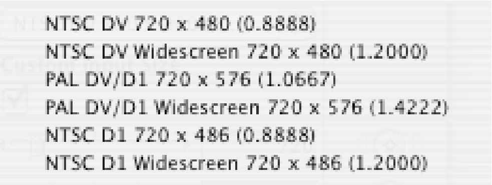
Instant HD for Final Cut Pro uses a different set-up and workflow and has a different interface to match. The Instant HD interface has a preset pop-up for input size as well as Custom Size controls.



☑ Instant HD	
	About...
Input Size	NTSC DV 720 x 480 (0...
	Custom Input Size
Use Custom Size	☑
Input Width	720
Input Height	480
Input Aspect Ratio	0.89
Fit to fill	☐
Filter type	Better
Sharpness	3
Quality	10
Antialiasing	2

The Instant HD interface for Final Cut Pro

The Input Size is used to specify the size of the source video. Instant HD will use this to scale to fit (by height) to the dimensions of the sequence. The Input Size pop-up menu allows you to choose from standard NTSC DV, NTSC DV Widescreen, PAL DV/D1, NTSC D1, and NTSC D1 Widescreen sources. These are the most common source sizes.


NTSC DV 720 x 480 (0.8888)
NTSC DV Widescreen 720 x 480 (1.2000)
PAL DV/D1 720 x 576 (1.0667)
PAL DV/D1 Widescreen 720 x 576 (1.4222)
NTSC D1 720 x 486 (0.8888)
NTSC D1 Widescreen 720 x 486 (1.2000)

The Instant HD Input Size pop-up menu options

Once the input size is properly specified, Instant HD will scale the input video to fit by height to the output sequence size. The workflow for this is explained below. The Custom Size check box lets you override the Input size menu. When you click the check box, Instant HD uses the values in the Input Width, Input Height and Input Aspect Ratio fields.

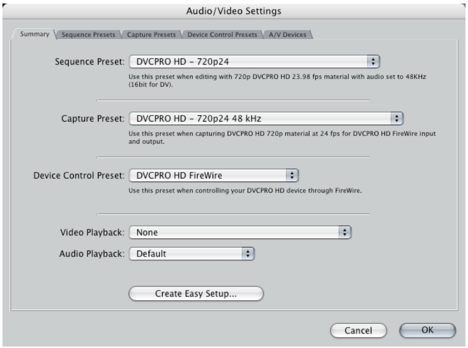
Fit to Fill. If you want to fill the entire area of the frame with the output video, choose the Fit to Fill check box. If the input video is not widescreen, then the output will be scaled up and the top and bottom part of the frame will be cropped out of the active area. For widescreen standard definition sources, the Fit to Fill option will produce the same results as the standard scale and is unnecessary.

The other controls in Final Cut Pro are identical to the After Effects version. Refer to the Instant HD Controls reference for more information on these controls starting on page 8.

Getting Started

Instant HD for Final Cut Pro has a very different workflow from the other plug-ins but is just as easy to use. Final Cut Pro does not let a plug-in resize or scale a frame to dimensions larger than the original video. To compensate for this limitation, you must use a nested sequence and a three-step scaling process. The first step is to create an output sequence that will match the final output size that you will create. We will call this the Source Sequence. The second step is to nest this sequence in your master timeline in HD resolution. We call this the Master Sequence. The final step is apply the Instant HD plug-in and set the Input Size to match the size of your source video. The following tutorial will walk you through the process.

1. In this tutorial, we are going to conform NTSC DV footage to match a DVCPRO HD 720p24 output using Instant HD. Begin by choosing the proper Audio/Video Settings for DVCPRO HD 720p24. Choose the Final Cut Pro menu > Audio/Video Settings... A dialog will appear. Choose the DVCPRO HD - 720p24 option from the Sequence Preset pop-up menu. Click OK to confirm your choice.



Sequence Preset: DVCPRO HD – 720p24

Use this preset when editing with 720p DVCPRO HD 23.98 fps material with audio set to 48KHz (16bit for DV).

Capture Preset: DVCPRO HD – 720p24 48 kHz

Use this preset when capturing DVCPRO HD 720p material at 24 fps for DVCPRO HD FireWire input and output.

Device Control Preset: DVCPRO HD FireWire

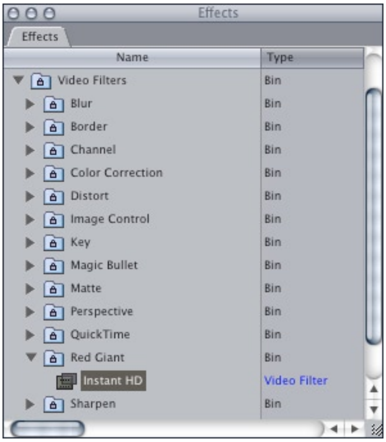
Use this preset when controlling your DVCPRO HD device through FireWire.

Video Playback: None

Audio Playback: Default

The Audio/Video Settings Dialog

2. Create a new project by choosing File > New Project. This will create a new project tab called Untitled and create a new sequence called Sequence 1 in the Project window. Save the project now and call it "Instant HD 720p Conform."
3. Next, rename Sequence 1 by highlighting the item and then clicking on the name. Rename the sequence to "DVCPRO HD 720p Source." This sequence will be source sequence for Instant HD.
4. Create a new sequence, File > New > Sequence. This will have the same settings as the last sequence. Highlight the item in the project and rename it "DVCPRO HD 720p24 Master."
5. Import a DV clip that matches the 24p frame rate by choosing File > Import... You can use the example clip, Playground_DV_24p.mov from the download package or installation CD.
6. Drag and drop the Playground_DV_24p.mov footage into the DVCPRO HD 720p Source sequence. You have now completed the setup of the source sequence.
7. Open the DVCPRO HD 720p24 Master sequence (if it is not already open). Drag and drop the DVCPRO HD 720p Source sequence onto the timeline of the Master sequence.
8. Drag and drop the DVCPRO HD 720p Source sequence into the Viewer. Reveal the Instant HD filter in the Effects tab under Video Filters > Red Giant > Instant HD. Drag and drop the Instant HD filter onto the image in the Viewer tab.



Name	Type
Video Filters	Bin
Blur	Bin
Border	Bin
Channel	Bin
Color Correction	Bin
Distort	Bin
Image Control	Bin
Key	Bin
Magic Bullet	Bin
Matte	Bin
Perspective	Bin
QuickTime	Bin
Red Giant	Bin
Instant HD	Video Filter
Sharpen	Bin

Instant HD can be found in the Video Filters folder within Final Cut Pro's Effects browser.

9. Once Instant HD is applied, the image will be scaled in the Canvas window to fit the Master sequence size.
10. Click the Filters tab in the Viewer window to reveal the Instant HD controls. Change the filter settings to the following values:

    Filter type: Best

    Sharpness: 3

    Quality: 10

    Antialiasing: 2
11. To see the results, choose Render Selection or hit Command-R to render the Master sequence. You can also export the video to QuickTime to evaluate the scaling outside of Final Cut Pro.