

## DEINTERLACEING IN AFTER EFFECTS CS4

In this tutorial we will manually Deinterlace footage in After Effects. For this you need an image file which contains the so called scanlines.

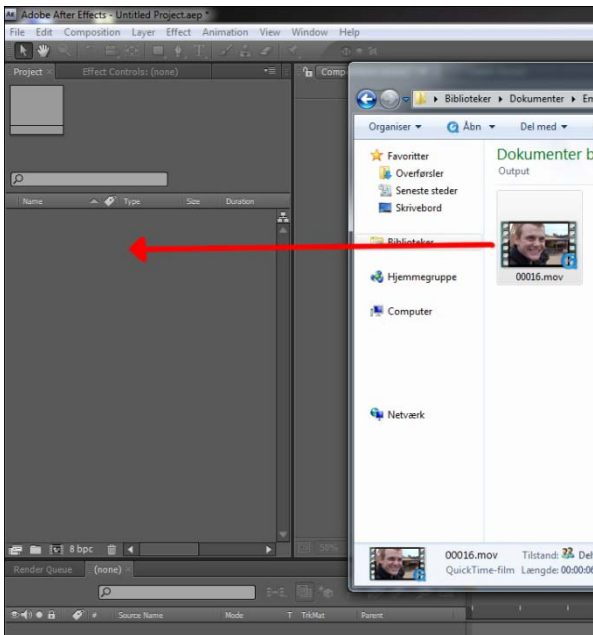
When a video is Interlaced, every frame is actually only half there, as illustrated below (the transition between two frames):



The image file you need for this process is included (scanlines for 1080i footage).

## Open After Effects

Import the video sequence you want to Deinterlace (drag n' Drop from Windows into the "Project" field):

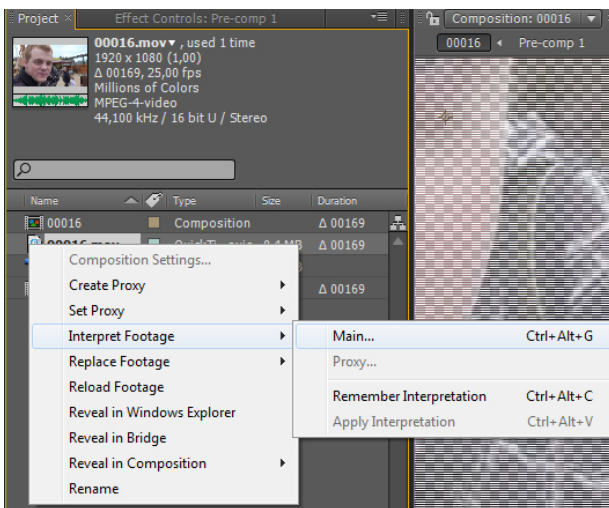


When the file is imported it should show up in the project field.

The next step is to create a new "Composition" from the video clip.

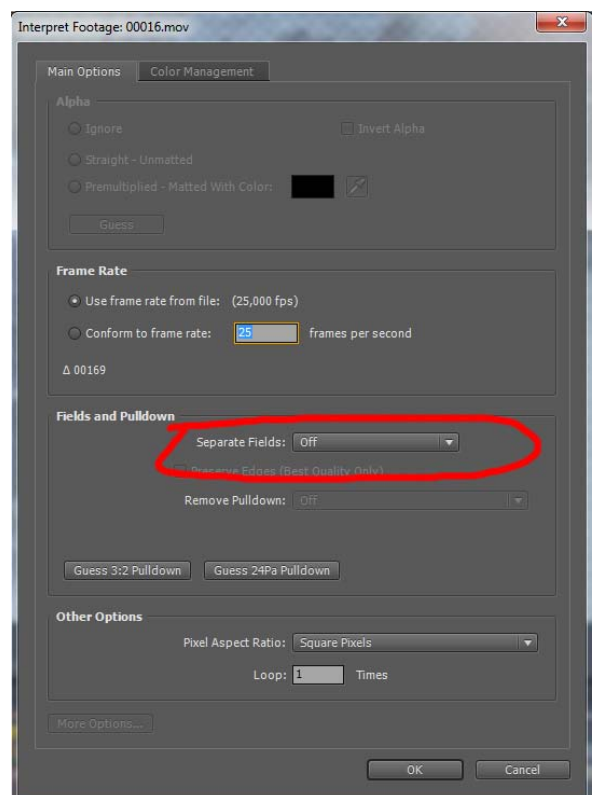
First it would be a good idea to check if our footage lives up to the expectations for Deinterlacing.

Right click the video file in the "Project" field.  
Choose "Interpret Footage" → "Main"



In the new window, make sure the "Fields and pulldown", "separate Fields" is set to "Off"

Click "OK"



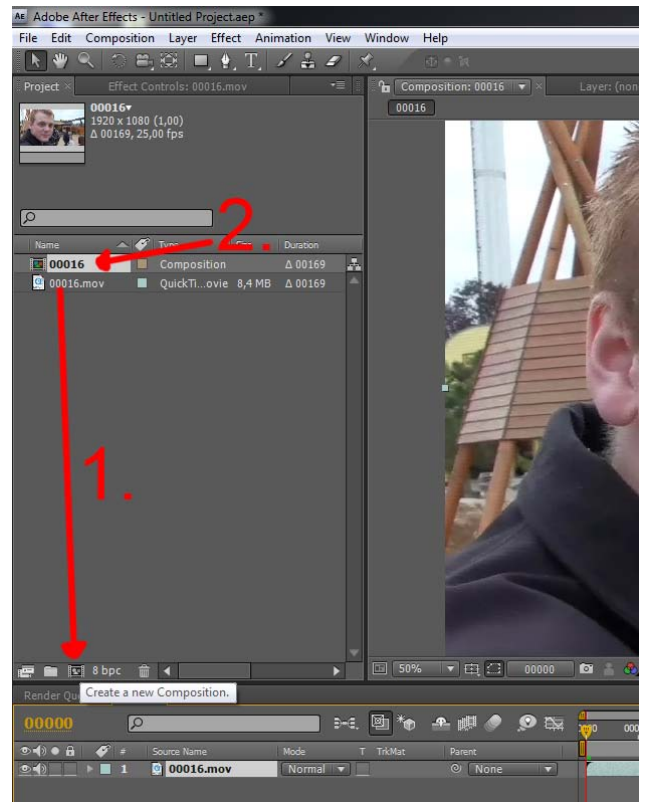
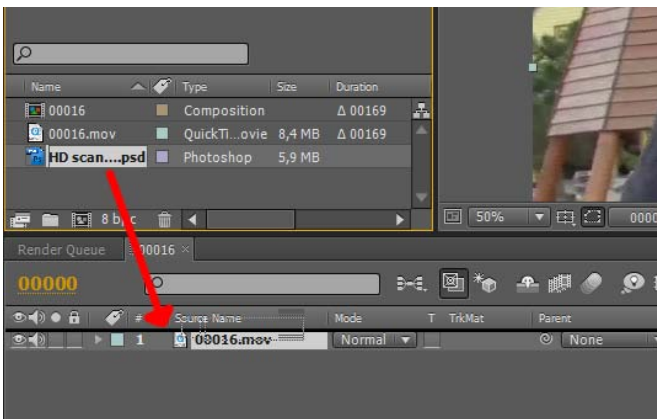
Click and drag the imported footage down on to the "Create new Composition" button (1.)

Now a new element should appear in the project field (2.), as well as the "timeline" field also gets the footage added (1.):

Now we have to import our scanlines image. This is done in the same way as with the footage.

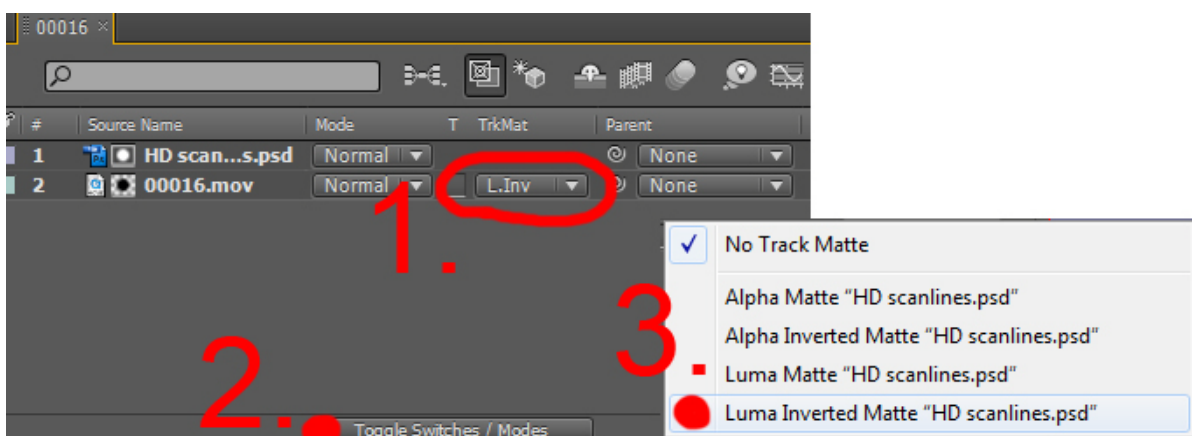
Click and drag the file "HD scanlines.psd", and drop it in the project field.

Now we need to click and drag "HD scanlines.psd" down above the footage in the "timeline" field:



Now the "HD scanlines.psd" is placed above the footage, the footage is overlaid in the preview field, and can't be seen.

Now we need to create a matte for one of the set of lines, so that they are masked out. This is



done by setting "TrkMat" to "Luma Inverted Matte".

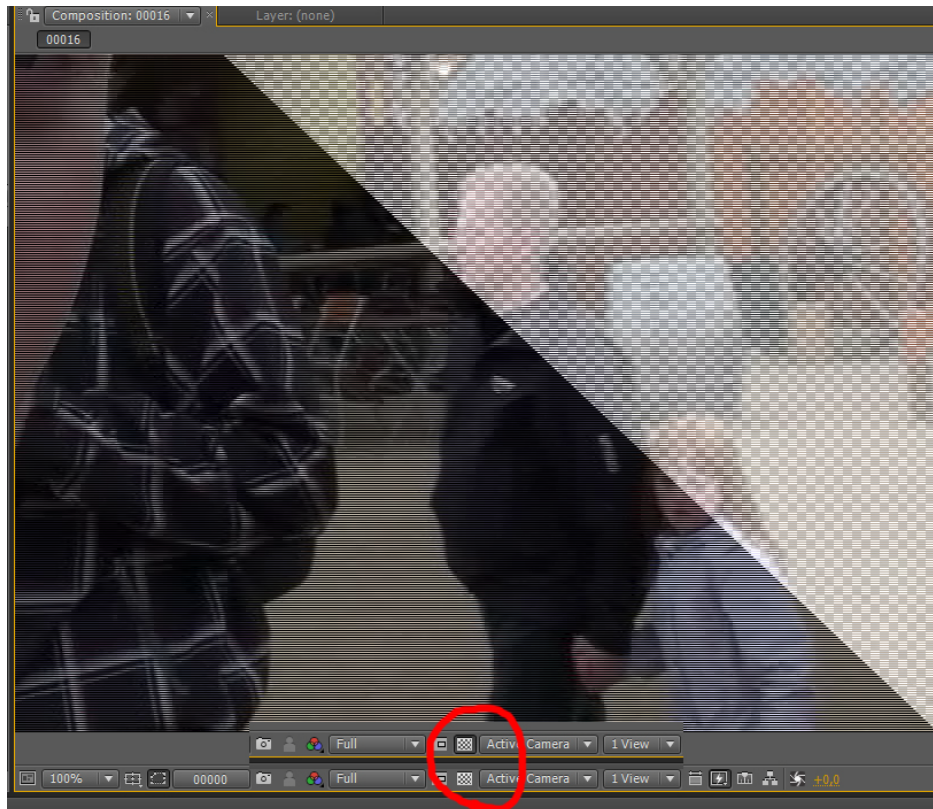
Click the "None" rollout in the "TrkMat" for the footage (1.) and choose "Luma Inverted Matte" (3.). if you can't see the "TrkMat" field, you have to click the "Toggle Switches / Modes" button (2.).



Now every second line in the footage has been matted out.

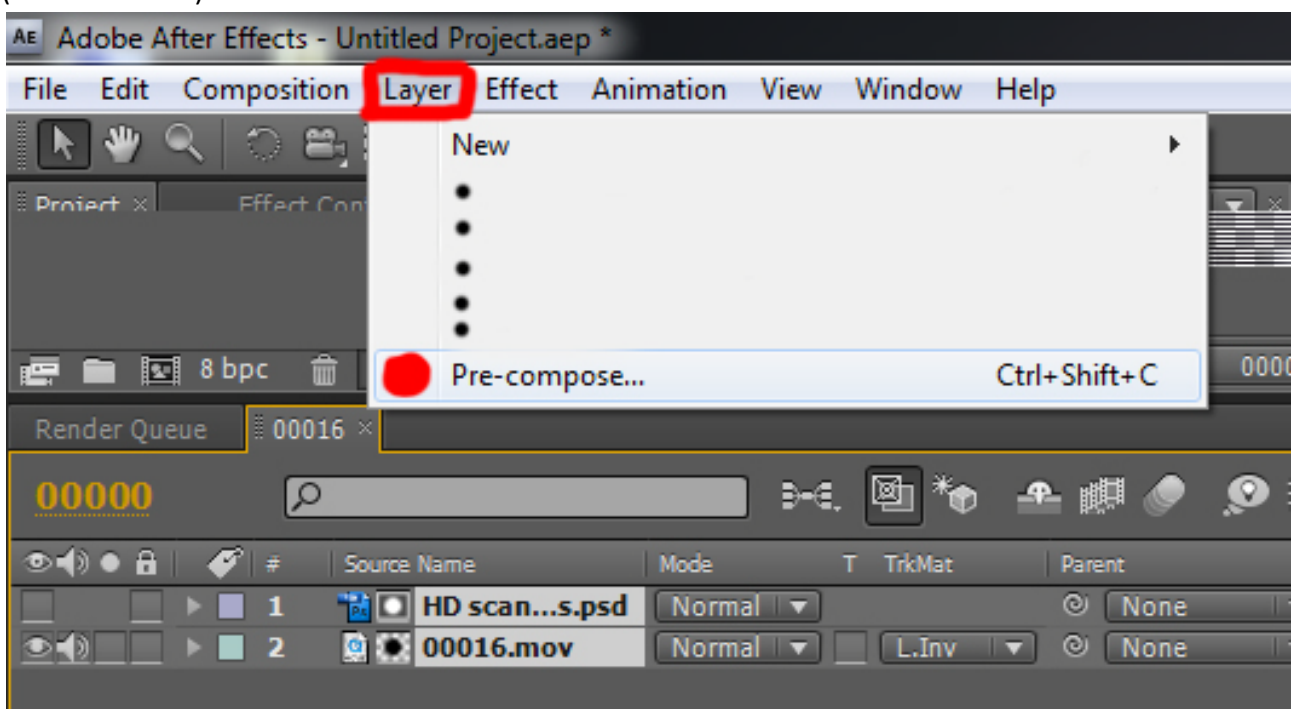
To see the effect, you can zoom in on your preview using the scroll on your mouse.

If you then set the "view transparency" on and off you can see every second line is see-through:



Now we want the program to help us fill the missing lines.

Mark the footage and the scanlines in the "timeline" field, and choose "Layer" → "precompose" (Ctrl + Shift + C).



In the new window choose "OK"

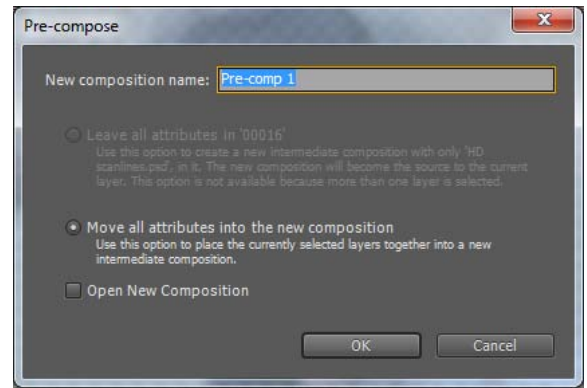
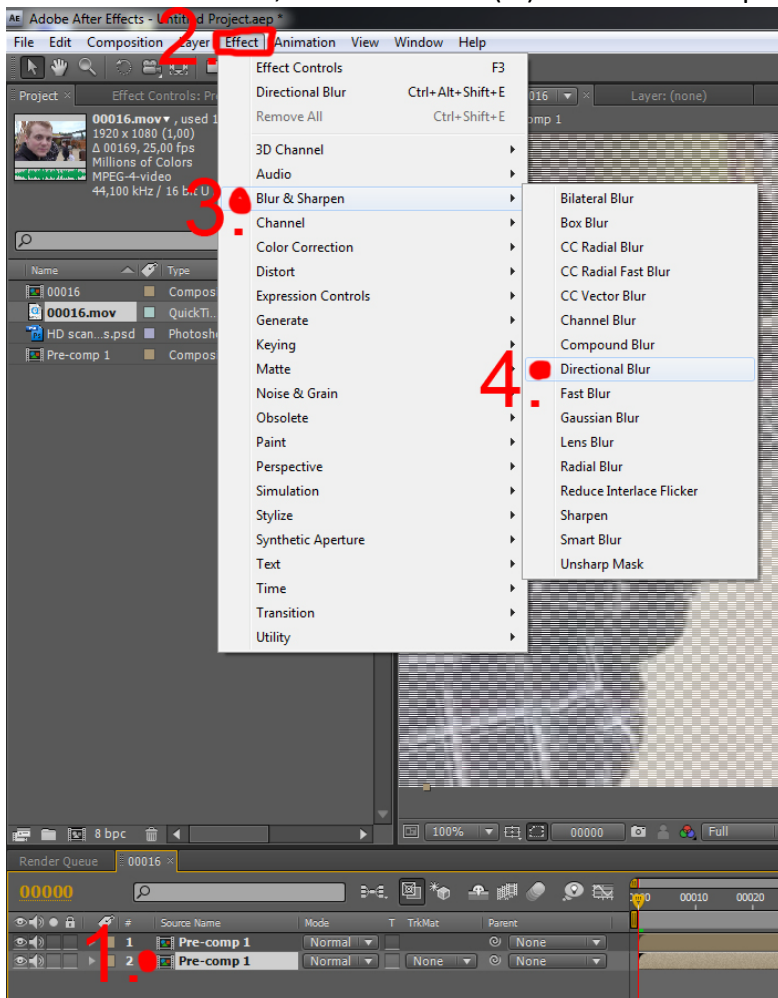
Now we have our footage and scanlines image, in a Composition for itself (a little like a sub layer, or group of layers), which we can work with.

The first thing we have to do, is to make a copy of our new Composition.

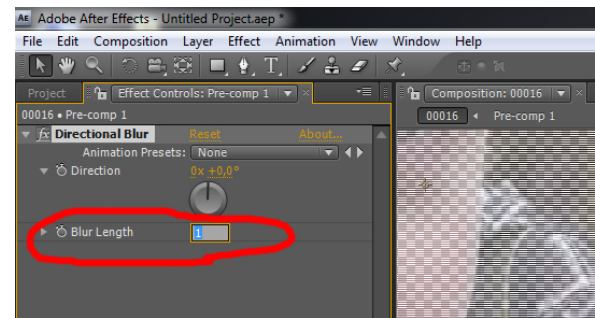
Mark the new Composition in the "Timeline" field, and press "Ctrl + D", this makes a copy/clone of the Composition.

Mark the bottom one of the two Compositions (1.).

In the "timeline" field, choose "Effect" (2.) → "Blur & Sharpen" (3.) → "Directional Blur" (4.):



In the settings for "Directional Blur", "Blur Length" set it to "1" (px):

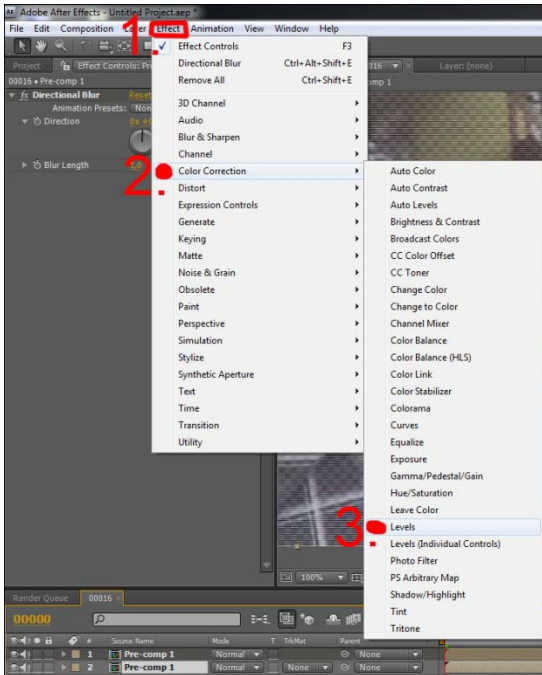


What we have done now is to make the bottom Compositions lines "smear" over into the "empty" lines in the top Composition.

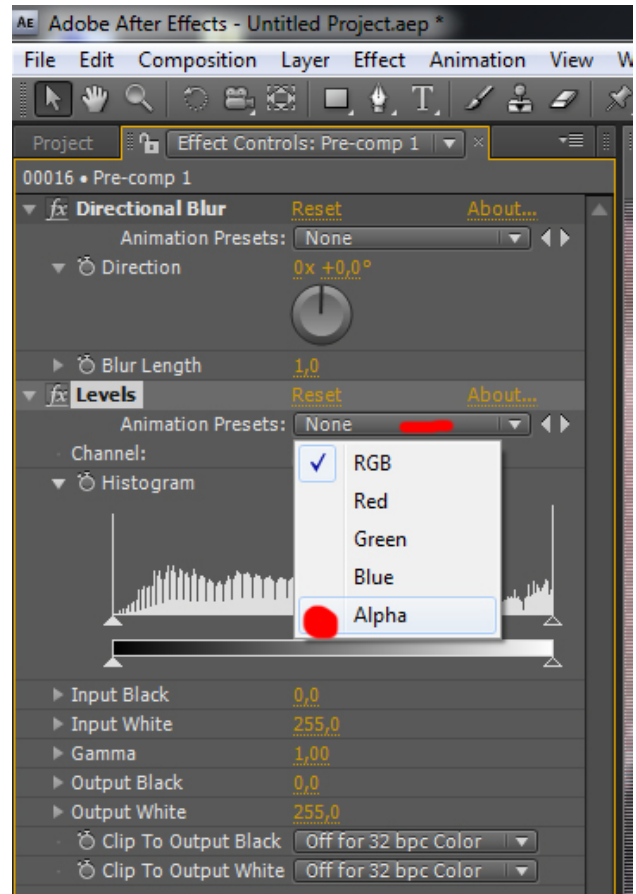
This doesn't solve out problem, because we still have some transparency in our footage.

To solve this, we need to "boost" our "Alpha" channel in the bottom Composition.

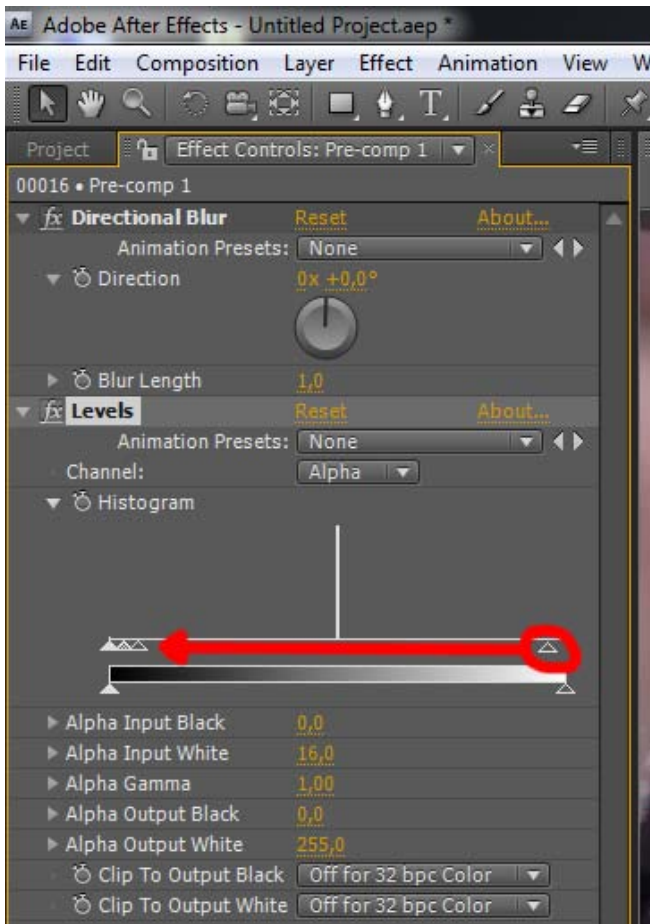
To increase the gain in our Alpha channel, mark the bottom Composition and choose "Effect" (1.) → "Color Correction" (2.) → "Levels" (3.):



Under "Levels" → "Animation Presets" choose "Alpha":



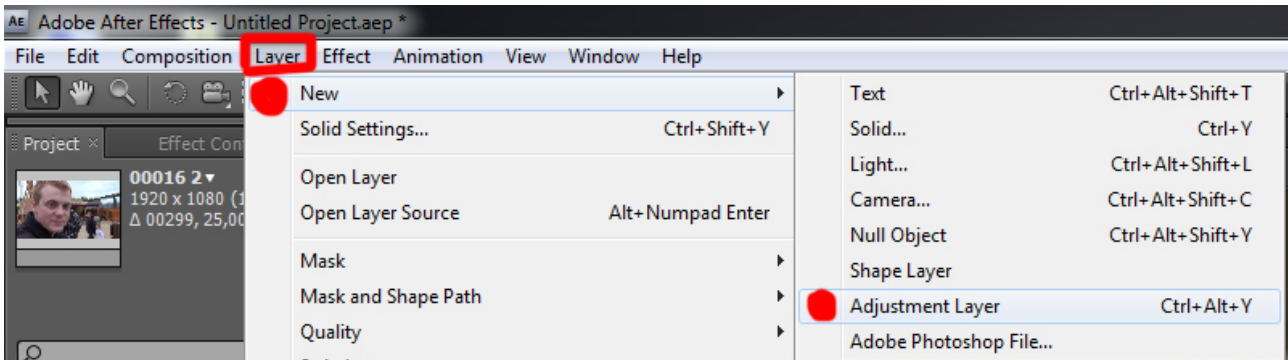
Now click and drag the slider to the far right almost all the way to the left, as shown here:



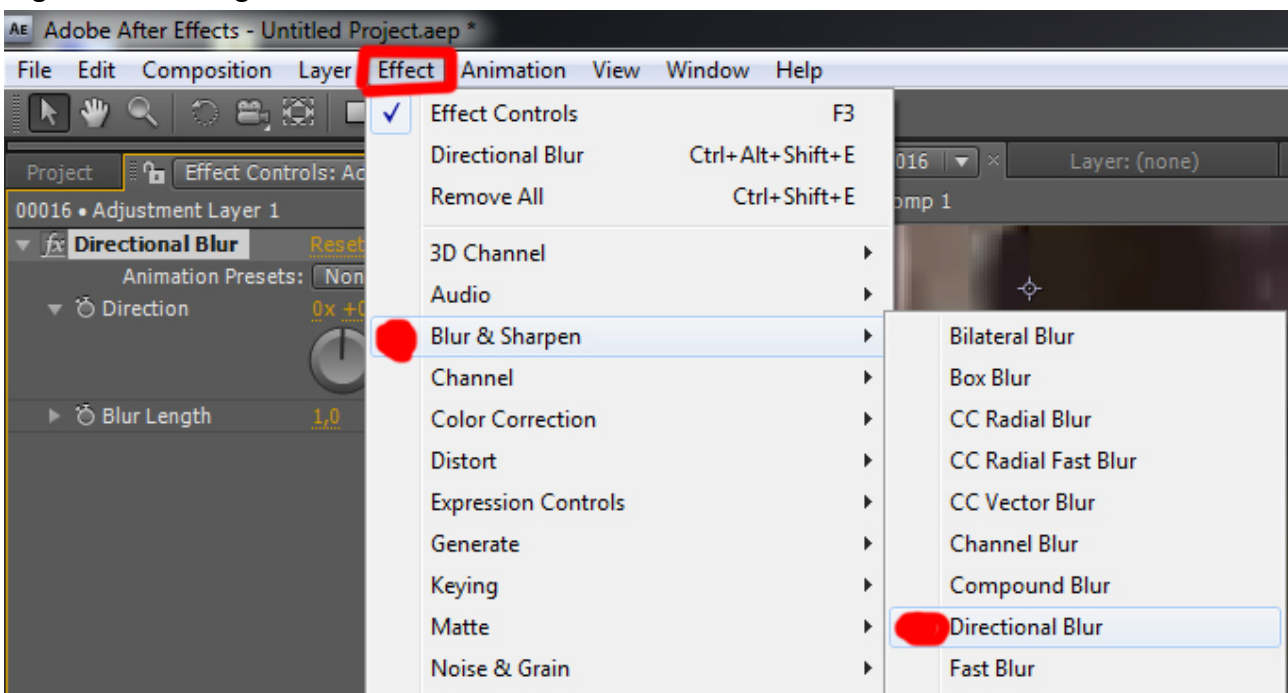
Now the Alpha channels gain has been increased, so it now leaves no transparency in the remaining lines.

We could say that we are finished Deinterlacing our footage now, but there is still one this we can do to make our footage look a little better.

We will now add an "Adjustment layer", which we then can manipulate a little.  
Click "Layer" → "New" → " Adjustment layer" or press (Ctrl + Alt + Y) to create the layer:



Now add a "Directional Blur" to the new layer.  
Click "Effect" → "Blur & Sharpen" → "Directional Blur".  
This time set the "Blur Length" to somewhere between 1.0 – 3.0, to get some smother looking edges in the footage.



You have now done all the steps in Deinterlacing footage.

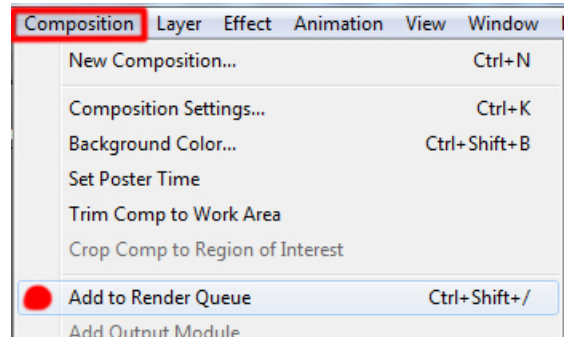


## RENDERING

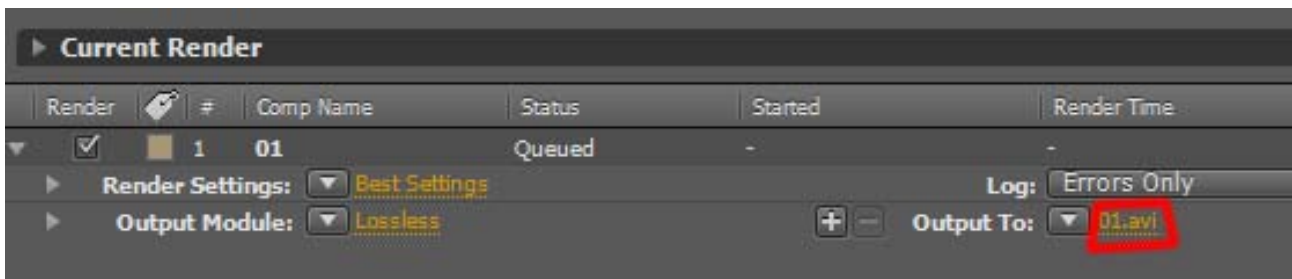
Some people render their AE results via an export. This is considered bad practice. The right way to render your results is to use the render queue.

Choose “Composition” → “Add to Render Queue”

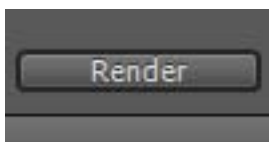
As a default the settings are set to a lossless AVI format, which is okay for this composition.



Click the “output to:” filename, (01.avi) and choose your output directory:



Then Click “Render”:



Now you are done.

I hope this basic guide has given you some insight into the basics of Deinterlacing footage.

This guide is off course very basic, and the Deinterlacing function is part of many programs today. This guide was thought as an exercise in understanding for the basics. It was also meant as a way of showing you not always to take every function and program for granted.