

1. In FCP create a new library.
2. Create a new project.
3. Use Automatic settings.
4. You'll see a warning: Adding HDR clip to SDR project.
5. If you want to edit in an SDR timeline go to the Effects library and choose HDR Tools.
6. Drag HDR Tools onto your clip.
7. Highlight the project and click Modify. You can't change the color space because the library which sits on top of everything else is using an SDR color space by default.
8. Highlight the library and go to Modify. A dialogue appears where you can change the color space to Wide Gamut HDR. This allows the projects under that library to adopt an HDR color space.
9. File > New > Project
10. Now you don't have to go into the project and choose Use Custom Settings to create an HDR project.
11. Now you can insert an HDR clip in the timeline which is now HDR.
12. (If you highlight the project and click Modify, the inspector shows the Color Space as Wide Gamut HDR – Rec. 2020 HLG.
13. Edit the footage. Use Scopes to be sure you're getting the most out of your HDR footage.
14. To export, go to Share > Export File > Settings tab.
15. Choose Format:
 - a. Video and Audio.
 - b. Video Codec: Apple ProRes 422. (Important – you want to make sure you choose a 10-bit codec. Any of the ProRes codecs will work fine. Avoid H.264 because it's an 8-bit codec.
16. This will give a VERY large file size. H.264 is 8-bit and will degrade quality. Instead...
17. Create an HDR deliverable using Compressor.
18. In the sidebar choose New Setting (bottom left corner).
19. Select Format > QuickTime Movie and give it a name.
20. In the Inspector (right panel), go to General > Properties > Format and click Optimize for network use.
21. In the Video tab, choose Codec > HEVC (not ProRes with its big file size).
22. Change Profile to 10-Bit Color.
23. You can change Data rate as needed by YouTube, etc. as needed (or not).
24. In the Audio tab, change the Codec to AAC. Change Quality to Maximum and Bit rate and Bit rate strategy to whatever you want. Main thing is changing the video codec.
25. Close Compressor and in FCPX go to the Share settings (right panel).
26. Double-click on Compressor Settings. You'll see HEVC 10-bit.
27. Click the Export File button at upper right and choose HEVC 10-bit.
28. Click Next and select the destination on the desktop or wherever, and click Save.
29. Expect that the export may be quite slow. DaVinci Resolve uses the GPU to make things very fast.
30. But the result is a very small file size, e.g., 92 MB instead of 1.7 GB.