What is ProRes? Which iPhone models does ProRes support?

In this article, TipsMake.com will learn with you what ProRes is and why this feature is equipped for iPhone 13.

During the iPhone 13 launch event, Apple announced that ProRes video recording will be available to the iPhone 13 Pro duo later this year through an iOS 15 update. But what exactly is ProRes and why is it? Is it a worthwhile feature for filmmakers?

What is ProRes?

In fact, Apple introduced ProRes back in 2007 as a feature of its video editing software Final Cut Pro 6. At the time, ProRes was advertised as providing stunning HD quality video but the file size was only SD. .

Based on that, we know one of the main features of ProRes. It can be said briefly that ProRes is a compression format, it was born to compress video files but not reduce the quality of the video.

ProRes includes 6 quality standards from the space-saving "ProRes 422 Proxy" to the ultra-high quality "ProRes 4444 XQ". It's still unclear which of these standards will be included in the iPhone 13 Pro, but Apple says you can record videos in 4K/30fps (except for the 128GB version which will be limited to 1080, 30fps).

Filmmakers choose which of the 6 standards of ProRes depends on their needs, whether to prioritize quality or prioritize file size. Some devices are limited, only supporting certain ProRes standards.

Below is a table of information of 6 ProRes standards and their storage capacity compared to an uncompressed file. This dashboard is taken from Apple's ProRes document published in 2020 based on recording a 1080p video

at 30fps.

What's the difference between ProRes 4:2:2 and 4:4:4? They differ in color coding. ProRes 422. 4:2:2 simplifies color information but remains 10-bit, providing enough fidelity to avoid obvious gamut in most cases. And as you can see even the highest quality ProRes files are still much smaller in size than uncompressed files.

Subsampling	Format	Bit-rate
4:2:2	Video 4:2:2 uncompressed	1.326Mbps
4:2:2	Apple ProRes 422 HQ	220Mbps
4:2:2	Apple ProRes 422	147Mbps
4:2:2	Apple ProRes 422 LT	102Mbps
4:2:2	Apple ProRes 422 Proxy	45Mbps
4:4:4	Video 4:4:4 uncompressed	2.237Mbps
4:4:4	Apple ProRes 4444 XQ	500Mbps
4:4:4	Apple ProRes 4444	330Mbps

Why not use ProRes in all circumstances? In fact, videos encoded in H.264 or H.265 format are still much smaller in size because they are designed to provide good quality images at low bit-rates.

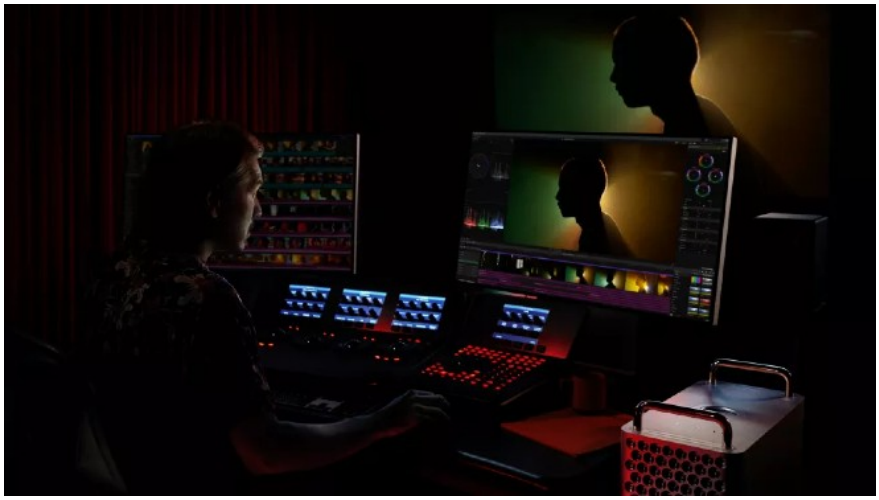
However, this type of encoding makes H.264 or H.265 videos very difficult to edit and requires more CPU resources. An old laptop can't even play 4K H.265 videos smoothly.

You can use ProRes in the editing/production part of the process before converting to a format that people can play on smartphones or TVs. Most likely the final format is H.264 or H.265. It should be further noted that YouTube now has good support for ProRes 422 format videos.

Content creators can upload ProRes videos directly to YouTube. However, after going through YouTube's compression process, your video will be converted to H.264 format.

Who is Apple ProRes for?

Anyone who regularly edits videos with professional software like Final Cut Pro, Premiere Pro or DaVinci Reslove should consider using ProRes.



ProRes can create high-quality videos while saving on storage space. Next, your computer will handle ProRes files better than other formats.

10-bit color fidelity makes your edits smoother, gradations don't appear obvious.

ProRes is available on which iPhone models? When will ProRes be released?

ProRes will only appear on iPhone 13 Pro and iPhone 13 Pro Max models. Apple said the launch time is later this year but has not revealed a specific date.

What does it mean for Apple to bring ProRes to iPhone 13 Pro and Pro Max?

The fact that ProRes was brought to the iPhone 13 Pro was a breakthrough for Apple. This move will help ProRes become even more popular.

In fact, ProRes is nothing new to those in the video industry. However, for those who are new to video creation, new to video production, ProRes is too strange. Therefore, allowing iPhone 13 Pro to directly support ProRes will be of great help to new users.

Previously, users were able to transcode MOV (H.264) and HEVC (H.265) videos to ProRes. But with iPhone 13 Pro, this format conversion process will be eliminated. This makes it easier for users to use and also helps preserve image quality by eliminating a single step of format conversion.

ProRes support also shows that Apple is confident in the video recording capabilities of the iPhone 13 Pro duo.

Apple also has another format, ProRes RAW, but most likely it won't make it to the iPhone.