Recording 57

Info: Apple ProRes is a variable bit rate (VBR) codec. As a result, the remaining recording time on the media may vary, being either shorter or longer than the estimate provided by the camera, depending on the content of the images being recorded.

Select Menu > Recording > Recording Codec to set the desired recording codec.

Following options are available:

Apple ProRes 422 HQ	12-bit LogC4 YCbCr	Use for high quality TV production. Suitable for creative color correction.
Apple ProRes 4444	12-bit LogC4 YCbCr	Use for high quality TV and cinema production. Very suitable for creative color correction and visual effects work such as pulling mattes.
Apple ProRes 4444 XQ	12-bit LogC4 YCbCr	The ideal choice for productions that are shooting for premium image quality, are looking for extreme color grading and want to preserve the superior tonal range of ARRI's Log C signal.
ARRIRAW	13 bit log	Use for cinema production, visual effects and high quality TV. It is the best format for creative color correction, visual effects work and archiving.

RAW

The set recording codec is indicated by the codec icon in the status information of EVF and SDI.

Info: Changing between ARRIRAW and Apple ProRes may require a camera reboot.

12.3 Sensor Mode & Recording Resolution

The sensor mode determines the size of the area on the sensor that is read out. This affects the maximum possible frame rate, the maximum data rate, and which lenses can be used. The sensor mode naming is composed of the number of horizontal photo sites in "K" (a thousand) and the aspect ratio used on the sensor.

The recording resolution is the resolution of the file that is being recorded in camera. Most of the time the number of photo sites read from the sensor and the number of pixels recorded are identical, in some other cases, as for instance in 4K 16:9 - 2K, the number of photo sites read out from the sensor is larger than the number of pixels recorded into the file.

Some of the following sensor modes are licensed. See "Licensing", page 91 for more information.

- ► Select *Menu > Recording > Sensor Mode* to select the desired Sensor Mode.
- ▶ Select *Menu > Recording > Recording Resolution* to select the associated Recording Resolution.

Info: Changing between Sensor Modes may require a camera reboot.

Info: The Recording Resolution is set automatically if a Sensor Mode offers only one associated Recording Resolution.

4.6K 3:2 Open Gate

4.6K 3:2 Open Gate provides maximum image quality, resolution, and flexibility in post for many spherical and anamorphic lenses in an image area slightly larger than traditional Super 35 film specifications.

4608 x 3164

Active Image Area (Photo sites) 4608 x 3164

Active Image Area (Dimensions) 28.0 x 19.2 mm / 1.102 x 0.756"

Image Circle Ø 33.9 mm / 1.337" **Recording Resolutions**

ARRIRAW 4.6K (4608 x 3164)

ProRes 4.6K (4608 x 3164)

Recording 58

4.6K 16:9

Full sensor width recording in a 16:9 format that suits many spherical Super 35 and all large format lenses, with room for flexibility in post. Lower data rate than 4.6K 3.2 Open Gate.



Active Image Area (Photo sites) 4608 x 2592

Active Image Area (Dimensions) 28.0 x 15.7 mm / 1.102 x 0.618"

Image Circle Ø 32.1 mm / 1.264"

Recording Resolutions

ARRIRAW 4.6K (4608 x 2592)

ProRes 4K (4096 x 2304)

4K 16:9

4K 16:9 mimics the traditional spherical Super 35 film format for maximum lens compatibility. Multiple in-camera downsampling options provide lower data rates.



Active Image Area (Photo sites) 4096 x 2304

Active Image Area (Dimensions) 24.9 x 14.0 mm / 0.980 x 0.551"

Image Circle Ø 28.6 mm / 1.125"

Recording Resolutions

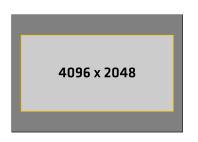
ARRIRAW 4K (4096 x 2304)

ProRes 4K (4096 x 2304) UHD (3840 x 2160) 2K (2048 x 1152)

HD (1920 x 1080)

4K 2:1

4K 2:1 was designed for shooting with all spherical Super 35 and large format lenses for a target deliverable of 2:1, fulfilling 4K mandates.



Active Image Area (Photo sites) 4096 x 2048

Active Image Area (Dimensions) 24.9 x 12.4 mm / 0.980 x 0.490"

Image Circle Ø 27.8 mm / 1.095"

Recording Resolutions

[ARRIRAW] 4K (4096 x 2048)

ProRes 4K (4096 x 2048)

3.8K 16:9

For projects using spherical lenses for a 16:9 UHD deliverable. Smaller sensor area than sensor mode '4.6K 16:9' ensures that most S35 format lenses cover. Lower data rate and higher fps than sensor modes '4.6K 3:2 Open Gate' and '4.6K 16:9'.



Active Image Area (Photo sites) 3840 x 2160

Active Image Area (Dimensions) 23.3 x 13.1 mm / 0,918" x 0.516"

Image Circle Ø 26.8 mm / 1.054"

Recording Resolutions

[ARRIRAW] UHD (3840 x 2160)

ProRes UHD (3840 x 2160)

Recording 59

3.3K 6:5

For projects using 2x anamorphic Super 35 lenses for a target deliverable of 2.39:1. Negates necessity of cropping 4:3 footage and fulfills 4K mandates.



Active Image Area (Photo sites) 3328 x 2790

Active Image Area (Dimensions) 20.2 x 16.9 mm / 0.796 x 0.693"

Image Circle Ø 26.4 mm / 1.039"

Recording Resolutions

ARRIRAW 3.3K (3328 x 2790)

ProRes 3.3K (3328 x 2790) 4K 2.39:1 Ana. 2x (4096 x 1716)

3K 1:1

3K 1:1 was designed for shooting with 2x anamorphic lenses for a target deliverable of 2:1, fulfilling 4K mandates.



Active Image Area (Photo sites) 3072 x 3072

Active Image Area (Dimensions) 18.7 x 18.7 mm / 0.737 x 0.737"

Image Circle Ø 26.4 mm / 1.041"

Recording Resolutions

ARRIRAW 3K (3072 x 3072)

ProRes 3K (3072 x 3072) 3.8K 2:1 Ana. 2x (3840 x 1920)

2.7K 8:9

For projects shooting with 2x anamorphic lenses for a target deliverable of 16:9, fulfilling 4K mandates. Desqueeze applied in-camera.



Active Image Area (Photo sites) 2743 x 3086

Active Image Area (Dimensions) 16.7 x 18.8 mm / 0.656 x 0.738"

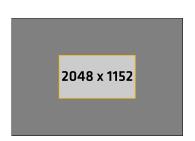
Image Circle Ø 25.1 mm / 0.988"

Recording Resolutions

ProRes UHD 16:9 Ana. 2x (3840 x 2160)

2K 16:9 S16

2K 16:9 S16 mimics the traditional Super 16 format for use with Super 16 lenses or as an in-camera center crop.



Active Image Area (Photo sites) 2048 x 1152

Active Image Area (Dimensions) 12.4 x 7.0 mm / 0.490 x 0.276"

Image Circle Ø 14.2 mm / 0.561" **Recording Resolutions**

ProRes 2K (2048 x 1152)

For additional information please see "Data Rates, Recording Times and Max. FPS", page 128.