



grass valley

Rio 4K/8K

High performance online editing,
color and finishing

Supported File Formats

Software Version v4.5.8 (June 2020)

www.grassvalley.com

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Rio V4.5.8 supported file formats

Supported file formats

Extension	File Format	Import	Export	Soft Mount
.aif .aiff	Audio Interchange File Format ***	yes		
.ari	ARRI Raw files	yes		yes
	ARRI ALEXA Raw files	yes		yes
.asf	Windows Media 9 series	yes	yes	
.avi	Audio Video Interleaved files	yes	yes	yes
	CineForm files	yes		
.bmp	Windows bitmap image files	yes		
.cda	Compact Disk Audio tracks	yes		
.cin	Kodak Cineon files	yes	yes	yes
.cine	Vision Research Phantom files	yes		
.dng	Adobe DNG	yes		yes
	Cinema DNG – Blackmagic camera	yes		yes
.dpx	Digital Picture Exchange files	yes	yes	yes
.dv	DV video and audio files ***	yes		
.exr	OpenEXR files	yes	yes	
.gif	GIF graphic files ***	yes		
.icb	Truevision Targa image files	yes	yes	
.jng	JPEG Network Graphics	yes		
.jpg .jpeg .pjpeg	JPEG image files	yes	yes	
.m2v	MPEG-1/2 compressed files	yes	yes	
.m4a .m4p .m4v .mp4v	MPEG-4 (part 14) files	yes		

.mcf	MCF files (from ARRI Tornado)	yes		
.mng	Multiple-image network graphics	yes		
.mov	Apple ProRes	yes	yes	yes
	Avid DNxHD	yes		yes
	Avid DNxHR	yes		yes
	CineForm files	yes		
	QuickTime movie files**	yes	yes	yes (ProRes + others)
.mp2 .mp3	MPEG-1/2 audio ***	yes		
.mp4	GoPro camera files	yes		yes
	QuickTime movie files	yes	yes	yes (ProRes + others)
.mpg	MPEG-1/2 compressed files	yes	yes	
.mts .m2ts	Panasonic AVCHD*	yes		yes
.mxf	ARRI RAW files	yes		yes
	Apple ProRes files	yes		yes
	Avid DNxHD files	yes	yes	yes
	Avid DNxHR files	yes	yes	yes
	Canon C300	yes		yes
	MXF OP1a files	yes	yes	yes
	Panasonic AVC Intra 4K	yes		yes
	Panasonic P2 files	yes	yes	yes
	Sony F65/F5/F55 files	yes		yes
	Sony SR Master files (SStP)	yes	yes	yes
	Sony XAVC	yes	yes	yes
	Sony XDCAM	yes	yes	yes
	Sony X-OCN	yes		yes
.png	Portable Network Graphics files	yes	yes	
.png8	Portable Network Graphics 8-bit indexed with optional binary transparency	yes		

.png24	Portable Network Graphics Opaque 24-bit RGB	yes		
.png32	Portable Network Graphics Opaque or transparent 32-bit RGBA	yes		
.ptif .tiff64	Tagged Image File Format (TIFF) files	yes		
.r3d	REDCODE RAW (R3D) files	yes		yes
.raw	Raw YUV 422 SD files	yes		
.rgb	SGI files	yes		
.rmf	Canon Raw files (C500)	yes		yes
.tga	Truevision Targa image files	yes	yes	
.tif .tiff	Tagged Image File Format (TIFF) files	yes	yes	yes
.vob	DVD video files	yes		
	MPEG-1/2 compressed files	yes	yes	
.vpb	VPB files	yes	yes	
.vst	Truevision Targa image files	yes		
.wav	Waveform audio files	yes	yes	archives only
.wma	Windows Media 9 series	yes	yes	
.wmv	Windows Media 9 series	yes	yes	
.xc	Constant image uniform colour	yes		

* PCM audio only supported

** Some of the supported codecs may ignore (or override) some settings values, such as the 'video quality' value.

*** QuickTime installation required

Apple ProRes Export Support

Rio supports below formats for encoding with up to 16 ch audio

- Apple ProRes 422
- Apple ProRes 422 (HQ)
- Apple ProRes 422 (LT)
- Apple ProRes 422 (Proxy)
- Apple ProRes 4444

- Apple ProRes 4444 XQ (only supported by mov prores exporter)

Restrictions after Uninstallation of QuickTime for Windows

The following file import support will be lost if QuickTime is uninstalled:

- .aif, .aiff : Audio Interchange File Format
- .dv : DV video and audio files
- .gif : GIF graphic files
- .mp2, .mp3 : MPEG-1/2 audio

Sony XAVC Support

Export

Export to the Sony XAVC format is supported in the following resolutions/framerates:

Format	23.98p	24p	25p	29.97p	30p	50i	59.94i	60i	50p	59.94p	60p
1920 x 1080 (4:2:0)	yes		yes	yes		yes	yes				
1920 x 1080 (4:2:2)	yes		yes	yes		yes	yes		yes	yes	
2048 x 1080 (4:2:2)	yes	yes	yes	yes					yes	yes	
3840 x 2160 (4:2:2)	yes		yes	yes					yes	yes	
4096 x 2160 (4:2:2)	yes	yes	yes	yes					yes	yes	

Import and Soft Mount

XAVC HD Profile for the XAVC MXF File format

Format	Max Bit Rate (Mbit/s)	23.98p	24p	25p	29.97p	50i	59.94i	50p	59.94p
1280 x 720	50							yes	yes
1920 x 1080	50	yes		yes	yes	yes	yes	yes	yes
1920 x 1080	35	yes		yes	yes	yes	yes	yes	yes
1920 x 1080	25	yes		yes	yes	yes	yes		

XAVC 4K Profile for the XAVC MXF File Format

Format	Max Bit Rate (Mbit/s)	23.98p	24p	25p	29.97p	50i	59.94i	50p	59.94p
3840 x 2160	188	yes		yes	yes				

3840 x 2160	300							yes	yes
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DNxHD Parameter

DNxHD	Scan	Width	Lines	Bits	23.976/ 24	25	29.97	50	59.94			
220X	Interlaced	1920	1080	10			yes					
220				8			yes					
145				8			yes					
185X				10		yes						
185				8		yes						
120X				8		yes						
220X				Progressive	1280	720	10			yes		
220	8						yes					
145	8						yes					
45	8						yes					
185X	10		yes									
185	8		yes									
120	8		yes									
36	8		yes									
175X	10		yes									
175	8		yes									
115	8		yes									
36	8		yes									
220X	Progressive	1280	720				10					yes
220							8					yes
145				8					yes			
185X				10				yes				
185				8				yes				
120				8				yes				

Quality vs Frame Rate

The following table shows the recommended DNxHD format for quality vs frame rate for 1080 material:

	23.976/24	25	29.97
10-bit	175X	185X	220X
8-bit High	175	185	220
8-bit Medium	115	120	145
8-bit Low	36	36	45

Camera Support

RED Cameras

RED ONE
 SCARLET
 EPIC MYSTERIUM-X
 EPIC DRAGON

File Format	Extension	Import	Soft Mount	Export
RED RAW	.r3d	yes	yes	

Sony Cameras

F65 RAW, SStP
 F65RS RAW
 F55 RAW, SStP
 F5 RAW, SStP, XAVC
 VENICE RAW, X-OCN

File Format	Extension	Import	Soft Mount	Export
RAW	.mxf	yes	yes	
SStP	.mxf	yes	yes	yes
XAVC (F55, F5)	.mxf	yes	yes	yes
X-OCN	.mxf	yes	yes	

Canon Cameras

C500
 C300

File Format	Extension	Import	Soft Mount	Export
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RAW	.mf	yes	yes	
MPEG	.mxf	yes	yes	yes

* Conform does not support MPEG file

C500 Mark II

C300 Mark II

File Format	Extension	Import	Soft Mount	Export
XF-AVC	.mxf	yes	yes	

* Cinema RAW Light file is not supported

ARRI Cameras

ALEXA

ALEXA Mini

ALEXA LF

ALEXA Mini LF

File Format	Extension	Import	Soft Mount	Export
RAW	.ari	yes	yes	
	.mxf	yes	yes	
ProRes	.mov	yes	yes	yes
	.mxf	yes	yes	
DNxHD (only ALEXA)	.mxf	yes	yes	yes

Blackmagic Cameras

Blackmagic Cinema Camera series

File Format	Extension	Import	Soft Mount	Export
DNG RAW	.dng	yes	yes	
ProRes	.mov	yes	yes	yes
DNxHD	.mxf	yes	yes	yes