Avid Media Composer - Supported File Formats

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Quick Lookup of Common File Formats

Avid attempts to qualify a reasonable number of devices for the support of common industry formats. Media generated in these formats have been tested for some brand name devices, however Avid cannot guarantee that all formats will behave in a consistent manner. In general, if the media you are using comes from a device that is compliant with the industry format specification, then you should be able to use that media in an Avid editing application.

The tables on the following pages list the formats supported by the most recent versions/models of the Avid products.

Legend	
Native Formats	Media formats whose codec is natively supported. Therefore, no additional processing of the media is required during acquisition into the Avid editing application. The media is simply rewrapped so that it can be stored directly in the Avid MediaFiles folder. During import, these formats will come in much more quickly (i.e. Fast import), and can also be consolidated, transcoded or rendered in their native format.
Non-native Formats	Media formats whose codec is not natively supported by the editing system. These formats require transcoding during acquisition before they can be stored in the Avid MediaFiles folder.
	Indicates that this function is not applicable for the given format.
√	Marked areas indicate that this format or operation is supported.
	Blank areas indicate that this format or operation is not known to be supported.

Column Heading Definitions	
Industry Format	Commonly known name for industry format.
Device Format Trademark	Trademarked names for given device format. May vary from one vendor to the next but are usually compliant with the standard industry format specification.
Subformat	Subformats supported by the given device.
Container Format	The wrapper around the media that contains instructions on how to open the file.
Codec	Alternate industry trademarked names for given codec.
Standard	Image size supported by codec.
Link to file via AMA	Links to the said format for viewing, transcoding and other file management operations.
Write-back to Original Device	Output of the sequence back to its native device format, and generation of files in the device's native folder structure.
Export to File	Output of the sequence back to original file-based format, and generation of a single file (or a numbered file sequence).

Common Industry Formats

The table below has alphabetically listed the media formats by their known industry name. Alternatively, you may use the trademark name, subformat or codec to identify the type of media you are using.

File Formats supported for Linking via AMA (using Avid or 3rd-party AMA plug-ins)

| Industry Format | Device Format Trademark | Subformat | Container Format | Codec | Standard | Media Composer | | | AirSpeed (various models available) | | Interplay |
						Link to file	Write-back to Original device	Export to file	AirSpeed Ingest	AirSpeed Play-to-Air (STP)	Interplay Support
ARRI	ARRI Alexa	Quicktime ProRes			2K	√					
		Avid DNxHD	MXF OP-Atom	All Avid DNxHD codecs	HD	√					√
		ARRIRAW		All Avid DNxHD codecs		√					
AVCHD	Canon AVCHD		MTS	H.264	HD	√					
	JVC AVCHD					√					
	Panasonic AVCHD (AVCCAM) Sony AVCHD (NXCAM)					√					
AVC-INTRA	Panasonic P2	AVC-Intra 50	MXF OP-Atom	AVC-Intra 50	HD	√			√		√
		AVC-Intra 100	MXF OP-Atom	AVC-Intra 100	HD	√			√		√
CINE	Phantom				HD 4K	√					
DVC PRO	Panasonic P2	DVCPRO 25	MXF OP-Atom	DV 25	SD	√	√		√		√

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Industry Format	Device Format Trademark	Subformat	Container Format	Codec	Standard	Link to file	Write-back to Original device	Export to file	AirSpeed Ingest	AirSpeed Play-to-Air (STP)	Interplay Support
		DVCPRO 50	MXF OP-Atom	DV 50	SD	√	√		√		√
		DVCPRO HD	MXF OP-Atom	DV 100	HD	√	√				√
GFCAM	Ikegami GFCAM	MPEG-2 Long GOP	MXF OP-Atom	MPEG-2	HD	√			√		
		MPEG-2 I-frame MPEG IMX	MXF OP-Atom	MPEG-2	SD	√			√		
		DVCAM	MXF OP-Atom	DV 25 411	SD	√			√		
				DV 25 420		√			√		
HDCAM SR	Sony HDCAM SR	HDCAM SR-Lite	MXF	MPEG-4 SStP (Simple Studio Profile)	HD	√					√
		HDCAM SR-SQ	MXF	MPEG-4 SStP (Simple Studio Profile)	HD	√					√
MXF*	Any 3rd party		MXF OP-1A	DNxHD /VC-3	HD	√					
QUICKTIME	Apple

Avid makes every effort to support QuickTime files from various devices.

A QuickTime file which uses an Avid native codec can be Consolidated, Transcoded and Rendered.

A QuickTime file using a non-native codec can only be Transcoded. | | MOV | DV 25 411 | SD | √ | | √ | | | √ |
			MXF	ProRes 422 ProRes 422 HQ ProRes 422 LT ProRes Proxy ProRes 444	SD	√		Mac only			√
					HD	√		Mac only			√
					4K	√		Mac only			
			QT	AVC-Intra (H.264)	HD	√		√			√
				DV PAL 420	SD	√		√			√
				DV NTSC 411	SD	√		√			√
				DV 50	SD	√		√			√

Industry Format	Device Format Trademark	Subformat	Container Format	Codec	Standard	Link to file	Write-back to Original device	Export to file	AirSpeed Ingest	AirSpeed Play-to-Air (STP)	Interplay Support
				DV 100	SD	√		√			√
				DV 100	HD	√		√			√
				DVC PRO 50	SD	√		√			√
				MPEG-2 I-frame	SD	√		√			√
				MP4	4K	√					
				XDCAM HD	HD	√		√			√
				XDCAM HD 422	HD	√		√			√
				All Avid DNxHD codecs	HD	√		√			√
				All non-Avid codecs	SD/ HD	√		√			
RED	RED RED EPIC		R3D	REDCODE	2K	√					√
					3K	√					
					4K 4.5K	√					
XAVC	Sony XAVC				SD	√	√				
	Sony XAVC Intra HD				HD	√	√				√
	Sony XAVC Long			MPEG-2 Long-GOP	HD						
XDCAM	Sony MPEG	MPEG-IMX	MXF OP-1A	MPEG-2 I-Frame 30	SD	√	√	√	√		√
XDCAM EX	Sony XDCAM EX	XDCAM EX 35				√					√
XDCAM HD	Sony XDCAM	XDCAM HD 17.5 XDCAM HD 35 XDCAM HD 50 XDCAM HD420 XDCAM HD422	MXF OP-1A	MPEG-2 Long-GOP	HD	√	√	√	√		√
				MPEG-2	SD	√	√	√			√

Industry Format	Device Format Trademark	Subformat	Container Format	Codec	Standard	Link to file	Write-back to Original device	Export to file	AirSpeed Ingest	AirSpeed Play-to-Air (STP)	Interplay Support
				I-Frame 40							
				MPEG-2 I-Frame 50	SD	√	√	√	√		
XDCAM Proxy	Sony XDCAM Proxy	MPEG-4	MPEG-4	MPEG-4 Advanced Simple Real Time	SD	√					√
	Sony XDCAM EX	XDCAM EX	AVI	DV 25	SD	√					
			MP4 or MXF OP-1A	MPEG-2 Long-GOP	HD	√					
XF	Canon XF	MPEG		MPEG-2	HD	√					

Application & Device-Generated Formats

The following tables list digital file formats recorded by devices (such as field recorders) or generated by third-party applications.

Generated Format	Format Trademark	Wrapper	Codec	Codec Tradename	Standard	Import from file	Link to file via AMA	Export to File
AVI		AVI				√	√	√
DPX								
MPEG-2 Long-GOP	HDV	M2T	MPEG-2			√	√	√
	AVCHD	MTS	H.264			√	√	
MXF		OP-Atom	D10				√	
			VC-3	DNxHD	HD		√	
		OP-1A	DV 50				√	
			HDV				√	
			MPEG -2 I-frame				√	
			MPEG 40				√	
			MPEG 50				√	
			MPEG-2 HD Long-GOP 50				√	
			MPEG-2 HD I-Frame 100				√	
			DV25	DVCAM			√	
			XDCAM HD			√	√	
QUICKTIME Note: Not all supported file formats may be listed here, but Avid makes every effort to support any file that plays in the QuickTime player.		MOV	All Avid DNxHD codecs			√	√	√
		QT	All codecs			√	√	√
QUICKTIME REFERENCE		QT REF				√	√	√
WINDOWS MEDIA						√ Win VC1 only		√ Win VC1 only

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Generated Format	Format Trademark	Wrapper	Codec	Codec Tradename	Standard	Import from file	Link to file via AMA	Export to File
Alias		PIX				√	√	√
BMP		BMP				√	√	√
Chyron						√	√	√
Cineon						√	√	√
ERIMovie						√	√	√
Framestore						√	√	√
IFF		IFF				√	√	√
JPEG		JPG				√	√	√
OMFI		OMFI				√	√	√
PCX		PCX				√	√	√
Photoshop		PSD				√	√	√
PICT		PICT				√	√	√
Pixar						√	√	√
PNG		PNG				√	√	√
QT Rendition		QT				√	√	√
						√	√	√
SGI		SGI				√	√	√
Softimage		SI				√	√	√
SunRaster						√	√	√
TARGA		TARGA				√	√	√
TIFF		TIFF				√	√	√
Wavefront						√	√	√
Xwindows						√	√	√
YUV						√	√	√
AAF		AAF				√		√
AFE		AFE				√		√
OMF 1.0		OMF				√		√
OMF 2.0		OMF				√		√

Stereoscopic 3D Video Formats

FC - Frame Compatible media   FF - Full Frame media   * 3rd Party HW supports all formats except for 720p

Baseband Video Format	Software-Only systems		Mojo DX			Nitris DX			Nitris DX + 3D (AVCI)			Nitris DX + 3D (DNxHD)			3rd Party HW*	
	Baseband Capture	Baseband Output	Baseband Capture	Baseband Output	*Render/Mixdown	Baseband Capture	Baseband Output	*Render/Mixdown	Baseband Capture	Baseband Output	*Render/Mixdown	Baseband Capture	Baseband Output	*Render/Mixdown	Baseband Capture	Baseband Output
YUV 4:2:2 8-bit uncompressed			FC or FF 2-pass	FC	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF 2-pass	FC
YUV 4:2:2 10-bit (packed codec)			FC or FF 2-pass	FC	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF	FC or FF 2-pass	FC
RGB 10-bits			FC or FF 2-pass	FC	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC
DNx444			FC or FF 2-pass	FC	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC
DNxHD			FC or FF 2-pass	FC	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC
AVCI			FC or FF 2-pass	FC	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC
Others			FC or FF 2-pass	FC	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC or FF	FC or FF	FC or FF 2-pass	FC

Digital File Formats	Import/Export/Link via AMA
All formats normally supported by the editing application.	Each eye must be linked/imported/exported separately, and later grouped into an S3D clip.