



AVID EDITING PRODUCTS & **SONY XDCAM** COMPATIBILITY CHECKLIST

TESTED SONY CAMERAS & DEVICES

The following Sony XDCAM devices have been tested with Avid® editing products:

Standard Definition Decks:

- PDW-1500
- PDW -D1

High Definition Decks:

- PDW-F30
- PDW-F70

High Definition Cameras:

- PDW-F330
- PDW-F350
- PMW-EX1
- PMW-EX3

COMPATIBLE AVID PRODUCTS

Sony XDCAM devices are supported by the following Avid editing systems:

- Avid Media Composer® software
- Avid Media Composer Adrenaline™
- Avid Media Composer Mojo DX
- Avid Media Composer Nitris® DX
- Avid NewsCutter® XP software
- Avid NewsCutter Adrenaline
- Avid NewsCutter Nitris DX
- Avid NewsCutter Mojo DX
- Avid Symphony™ Nitris
- Avid Symphony Nitris DX

For the latest information, check out a complete [list of supported devices](#) at [avid.com](#)

OVERVIEW

XDCAM and XDCAM HD

Sony XDCAM decks and camcorders store media on optical discs with capacities of up to 23.3 GB. XDCAM SD devices can record media in MPEG IMX and DVCAM formats. XDCAM HD devices use the MPEG-2 HD codec for recording video and uncompressed audio. Simultaneously, XDCAM devices create corresponding low-resolution proxy media (MPEG-4). Low-res proxies allow an editor to work quickly in an offline editing session. When the edit is final, the proxy media is conformed to the corresponding high-resolution media in an online finishing session.

XDCAM EX

XDCAM EX records directly to SxS Memory Cards as MP4 files at either 25Mbps and 35Mbps. Avid supports the ability to import XDCAM EX clips which have been rewrapped as MXF files using the Sony Clip Browser Software (for Windows XP and Mac OS X).

KEY XDCAM FEATURES SUPPORTED

Key XDCAM features supported

- XDCAM SD (DVCAM)
- XDCAM HD 18Mbps, 25Mbps and 35Mbps
- XDCAM EX 25Mbps or 35Mbps (using the Sony Clip Browser software to rewrap the files as MXF)
- MPEG30/40/50 IMX
- MPEG-4 PROXY media
- Real-time playback of Variable Frame Rates
- (4-30fps) shot in 1080p23.976, 1080p25 fps
- Ingest via File-access Mode (FAM) over FireWire (IEEE-1394)
- Ingest via FTP client or TransferManager over Ethernet
- "Write back" to XDCAM media over FireWire (IEEE-1394)

AVID EDITING PRODUCTS & SONY XDCAM

XDCAM HD FORMAT SUPPORT

XDCAM Format	Bit Rate (Mbps)	Actual Format/Rate	Avid Project Type
1080i 60	18, 25, 25	1080i/59.94	1080i/59.94
1080i 50	18, 25, 35	1080i/50	1080i/50
1080p 29.97	18, 25, 35	1080p/29.97	1080i/59.94
1080p 25	18, 25, 35	1080p/25	1080p/25
1080p 23.976	18, 25, 35	1080p/23.976	1080p/23.976

XDCAM EX FORMAT SUPPORT

XDCAM EX Format	Bit Rate (Mbps)	Actual Format/Rate	Avid Project Type
1080i 60	25, 35	1080i/59.94	1080i/59.94
1080i 50	25, 35	1080i/50	1080i/50
1080p 29.97	25, 35	1080p/29.97	1080p/29.97
1080p 25	25, 35	1080p/25	1080p/25
1080p 23.976	25, 35	1080p/23.976	1080p/23.976
720p 59.94	25, 35	720p/59.94	720p/59.94
720p 25	25, 35	720p/25	720p/25
720p 50	25, 35	720p/50	720p/50
720p 23.976	25, 35	720p/23.976	720p/23.976

AVID WORKFLOW BENEFITS

- **Native Codec Support.** Start editing XDCAM right away without any digitizing, transcoding, or file conversion delays.
- **Thin Raster Support.** Maximize performance for editing and playback using the native raster size for XDCAM HD output via HD-SDI*.
- **XDCAM Proxy Support.** Avid editing systems support camera-generated low-resolution XDCAM proxy media for even faster offline workflows and storage efficiency.
- **Open Timeline.** XDCAM material can be mixed with codec from a variety of sources without having to render to a common format. Mix XDCAM with Avid DNxHD®, HDV, IMX, SD, DVCPRO HD, AVC-I material in real time in the same timeline. (Common frame rates and rasters are required for mixing different codecs.)
- **Full Camera Frame Rate Support.** Comprehensive support lets you edit SD and HD projects at 18, 25, and 35 Mbps.
- **Native MXF Support.** Support for native MXF media lets you keep your metadata throughout your XDCAM workflow.
- **Support for Variable Frame Rates.** Avid plays back material shot from 4fps to 60fps in real time without rendering. Avid editing systems can also manage frame rates from 31fps to 60fps with a resize effect.

*Full resolution output with Avid Adrenaline hardware requires a transcode to Avid DNxHD media.

AVID EDITING PRODUCTS & SONY XDCAM

SAMPLE XDCAM HD WORKFLOW

- Import 1080i 59.94 clips from Sony PDW-F70 deck via File-access Mode (FAM)
- Edit with proxy media (MPEG-4) with Avid Media Composer software
- Batch import high-res media
- Write the finished sequence back to the XDCAM Disk or output full raster HD over HD-SDI

The following workflow for an i.Link 1394 FAM (file access mode) connection can be used for all Sony XDCAM cameras and decks:

1. Make sure the deck is set to FAM mode (Deck must be set to "PC remote" and Sony ProDisc driver loaded on PC)
2. Create a 1080i 59.94 project
3. Optional - check import settings for desired behavior
 - Automatic proxy import
 - Import essence marks as locators
 - Import proxy, high-res, or both from disk
4. Connect the XDCAM device via 1394 to the computer (XDCAM disc will mount as either a FireWire device or a CD drive based on operating system)
5. Import the proxy media by any of the following methods:
 - Using the File menu command "import XDCAM proxy"
 - Automatically, based on "import" settings
 - Drag and drop XDCAM clips to bin – based on "import" settings

Note: it is also possible to import proxies from a drive other than the XDCAM disc, even from an FTP server. The XDCAM disk structure must be maintained and located at the root level of the given volume/drive. Be sure to copy the XML data at the root level when doing this. See Avid Help or User Guide for more information

6. Enter a "disk label" at the prompt (this disk label name will be used later in the high-resolution import step)
7. Edit using the proxy media (MPEG-4)
8. With sequence highlighted in the bin, select the "Clip > Batch Import" command to import native XDCAM HD, DVCAM, or MPEG IMX media, replacing the proxy media with the high-resolution media.
 - This will import only those portions of the high-resolution clip necessary for the sequence.
9. Output the finished sequence:
 - Highlight the sequence in the bin
 - Select "Output > Export to Device > XDCAM" or output via HD-SDI using the output tool

SAMPLE XDCAM EX WORKFLOW

- Import 1080p 23.976 XDCAM EX clips
- Edit with Avid Media Composer Mojo DX
- Perform a digital cut to HDCAM via HD-SDI

1. XDCAM EX clips (MP4 files) must be rewrapped as MXF files in order to import them in to the Avid. This does not change the MPEG2 essence (i.e., video and audio, it only changes the "container"). Use the Sony XDCAM EX Clip Browser application to convert the XDCAM EX MP4 files to MXF files prior to importing into Avid. Use the Export MXF command within the Clip Browser to rewrap the files to MXF.
2. On Media Composer create a 1080p/23.976 project
3. Select "File > Import, browse to the location of the XDCAM EX MXF files, and select them to import.
4. Create a sequence using the XDCAM EX clips.
5. Using Media Composer connected to either Mojo DX or Nitris DX hardware, perform a Digital Cut to output the sequence in its native raster format via HD-SDI as 23.976 or 59.94 with 2:3 pulldown.

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