



AVID EDITING PRODUCTS &

CANON HDV CAMERAS

COMPATIBILITY CHECKLIST

TESTED CANON CAMERAS

The following Canon HDV cameras have been tested with Avid editing products:

- XL H1
- XH G1
- XH A1

COMPATIBLE AVID PRODUCTS

Canon's HDV cameras 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® 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](#)

FORMAT SUPPORT

Canon's HDV cameras support SD via DV format recording and HD via HDV format recording. Avid Media Composer, Avid NewsCutter and Avid Symphony Nitris all support SD DV formats. For HD, these Avid systems support the following:

Canon Format	Resolutions	Actual Format/Rate	Avid Project Type
1080i 60	HDV	1080i/59.94	1080i/59.94
1080i 50	HDV	1080i/50	1080i/50
1080 30	HDV	1080p/30	1080i/59.94

Note:

- The XL H1 has a mode that allows for the recording of 4 channels of audio with HDV. When capturing in this mode, only channels 1 and 2 are captured.
- There is no 30p workflow provided for tapes recorded in 30F mode. These tapes can be ingested in a 1080i/59.94 project only.
- While the 24p HDV mode is not supported natively in the application, workflows exist for 3rd party devices (such as HD-Connect SI from [Convergent Design](#)) to capture through HD-SDI from the Canon HD-SDI output.



AVID EDITING PRODUCTS & CANON HVD CAMERAS

AVID WORKFLOW BENEFITS

- **Native HDV.** Native editing and playback of HDV material means no transcoding and no quality loss.
- **Avid Open Timeline.** HDV material can be mixed with SD material in the same timeline, in real time, as well as with any other HD material that uses the same time base. (Common frame rates are required for mixing different formats and codecs.)
- **Thin Raster Support.** Maximize performance for editing and playback using the native raster size for HDV (1440x1080) with simultaneous full raster output via HD-SDI.*
- **Smart Splicing.** Only material that has been changed is re-rendered for output, along with a small number of frames on either side of each cut point, dramatically cutting render times on output.
- **Avid DNxHD®.** Mix and match HDV with mastering-quality Avid DNxHD encoded media. Avid DNxHD encoding can be used to render multi-layer composites and import animations, overcoming the quality issues of editing with HDV media.

SAMPLE WORKFLOW

- Capture HDV and SD on Canon XL H1 at 1080i/59.94
 - Edit with Avid Media Composer software
 - Output back to HDV tape using Avid Media Composer
 - Output an SD master using Media Composer with Avid Mojo® SDI
 - Output an HD master using Media Composer Mojo DX
1. Create an Avid HDV project at 1080i/59.94 on the Media Composer software system.
 2. Connect the Canon XL H1 camera to the Avid Media Composer via the host system IEEE-1394 port.
 3. Go to Toolset > Capture

- a. Setup the Canon XL H1 camera in the deck configuration settings
 - b. Log and batch capture the HDV media or capture on the fly
 - c. For SD material, go to the format tab in the project window, and change the format to 30i. (this gives SD resolution options in the capture tool)
 - d. Capture SD material from the Canon XL H1 in DV mode
 - e. When SD capture is over, switch the format tab back to 1080i/59.94 HDV.
4. Edit the Sequence
 - a. Create a new sequence and mix the HDV media with NTSC DV media on the Avid timeline in real time.
 - b. Create titles and graphics using high-quality Avid DNxHD codec.
 5. Output final sequence to HDV tape
 - a. Select the sequence, and use "Output > Export to device > HDV". SD material will be transcoded to HD during the export process.
 6. Output final sequence to SD tape, with a 16:9 letterbox.
 - a. Make a copy of the HD sequence
 - b. Switch the format tab to "30i"
 - This will "turn on" the Avid Mojo/Mojo SDI downconvert SD output if an Avid Mojo is attached.
 - c. Create a new video track. Place a 16:9 Letterbox effect (reformat effect) across the entire track. This will create a "filler" track effect for the length of the program.
 - d. Perform a "Digital Cut" via the Avid Mojo SDI outputs to an SD SDI deck
 - e. Use the other Reformat options to create center cut 4:3 or no effect at all for anamorphic outputs.
 7. Using Media Composer connected to either Mojo DX or Nitris DX hardware, perform a Digital Cut to output the HDV sequence in its native raster format via HD-SDI (without the need to transcode to Avid DNxHD)

*Output with Avid Adrenaline hardware requires a transcode to Avid DNxHD media

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