



How the Casablanca Solitaire will edit HDV material

"SmartEdit HD/SD Dual Format Mode"

Sony's HDV products (particularly the HVR-FX1 camcorder) have created major interest among videographers worldwide. MacroSystem previously stated that the Solitaire users will be eligible for a free software update which will allow for complete editing of the high resolution HDV material.

In the meantime, MacroSystem has become officially listed as a supporter of the HDV format (www.hdv-info.org) and has therefore obtained all the required technical information on this new high resolution video format.

Based on this documentation, the Solitaire HDV project has been defined and the work has already begun.

As usual, a significant amount of time was spent to find the perfect strategy for HDV editing on the Solitaire.

A few assumptions have been made for the solution; we'd like to address them:

1. Our users want to shoot and edit HDV material, but they do not necessarily want to purchase expensive HD editing monitors and recorders.
2. Someday in the future there will be a successful HD-DVD standard and a good percentage of consumers will have compatible players at home. Until then, normal DVDs will remain the most important distribution medium, even if the footage has been recorded in HDV mode.
3. Our users want the most time-efficient method to create a HDV master tape, a DV master tape and a DVD master.
4. "Native" HDV quality is desired – no conversions.

We believe we have settled for a strategy that deals with all of the above listed requirements.

This is how it works:

1. The user records his footage in HDV.
2. He then records the HDV data into the Solitaire the normal 'Firewire way'.
3. He rewinds the tape and toggles the format switch of the camera from HDV to DV.



4. Then, he records the footage again, this time in DV. Result: The data is on the drive is in both, DV AND in HDV formats.
5. The user edits his material in DV, as usual, just like today with DV cameras.
6. The Solitaire performs all his DV editing choices (including effects, titles, etc) with the HDV material in the background – it can do that because the timecode is identical (after all, it is the same tape that delivered both formats). This requires additional rendering time – but it happens in the background.
7. Then, the user records the project to DV tape (real time), to HDV tape (real time) and finally to DVD (using the DV material as a source – DVDicon allows for high quality and fast conversions just as it does today).
8. Voilà!

This method does not require any new equipment, except the camcorder. The customer has the option to obtain an HD version of his video whenever HD-DVDs become a reality.

We are quite enthusiastic about this unique way to tackle the HDV challenge, and have initiated the development already.

A few more details:

As soon as processors are fast enough for high quality HDV-DV-conversions that are faster than real time, we will replace the second recording (the DV recording) with a software HDV-to-DV conversion. For now, letting the camcorder do the job is efficient enough.

To render effect images, we do not use motion compression to store them until the final rendering takes place. Such rendered images will be stored in full resolution I-Frame-only. Before the output to HDV tape, these images will finally be compressed in full MPEG HDV mode. This way, we limit the artifacts for multilayered effects to a minimum. The disadvantage being it takes a little more drive capacity.

A release date can not be given yet but, as usual, will be published once we achieve beta status.

Questions & Answers

Q: Will it be possible to edit HDV with Avio, Kron or Prestige?

A: No. Due to performance difference to the prior Casablanca systems, editing HDV will only be possible on Solitaire.

Q: Will it be an at-cost update?

A: No, the software update for editing HDV on Solitaire will be free.

Q: Will it be possible to play an HD-DVD on all DVD players?

A: No. To play an HD-DVD, you are likely to need a new, HD-DVD capable DVD player or a suitable playback program / drive for the PC.



Q: Will the HDV format replace the DV format in the future?

A: We expect that more and more manufacturers will support the high resolution HDV format because it represents a considerably better picture quality. With each new manufacturer to join the bandwagon, the HDV cameras will become cheaper. Soon, you can expect to see consumer HDV cameras.

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