JVC GY-HM100 ProHD 1/4" Camcorder



JVC has just introduced the GY-HM100, a break-through hand-held ProHD camcorder that records in native Apple Quicktime .mov file format directly to SDHC memory cards.

The camera is tiny; it fits in the palm of your hand. But the idea is big. After shooting (up to 50 minutes of 1080p onto a 16GB SDHC Memory Card, you can begin editing almost immediately by simply dragging and dropping the files into Final Cut Studio. Anyone who has wrangled or archived the baffling array of AVCHD and other hierarchical file formats will doubtlessly order one of these camcorder immediately for the sheer joy of having one file per scene.

The GY-HM100 ProHD camcorder records Quicktime files directly to those little SDHC solid state memory cards you see in most still cameras. Solid state prices have dropped to the point where recording 50 minutes of 1080p can now be less expensive than tape, and...sound the trumpets...it's so cost effective you would be foolish not to archive those SDHC cards as digital masters.

Since files can be recorded in Quicktime, the native .mov files could actually be edited directly from the solid state memory card with Apple's Final Cut Studio. But, you might prefer a more elegant aproach. There are (more angelic trumpets) two SDHC slots on the camcorder. So, when one card has filled up, you eject it, and either hand it off to your assistant/data wrangler/mini-DIT or do it yourself: copy the files into your laptop. Since, at last unofficial count, 99.9% of the readers of Film and Digital Times are on Mac, we'll assume you'll copy the files onto a MacBook Pro with an SD to Express Slot adapter (Sandisk SDAD109A11 Digital Media Memory Card to Express Slot Adapter) or with an SD card to USB adapter.

Meanwhile, you can still keep shooting, since you'll record to the other slot in the camcorder. "Traditionally, camera manufacturers have designed their products expecting NLE vendors to conform to proprietary or generic file formats resulting in an extra and often time consuming step when preparing to edit," Craig Yanagi explained. "Files created in the GY-HM100 can be edited immediately without conversion. It's truly the first camcorder designed for post production."

The JVC GY-HM100 ProHD camcorder weighs 3.1 lbs. It uses three progressive scan ¼" CCDs and records at data rates up to 35 Mbps in 1080/24p, 1080/25p, 1080/60i, 720p and much more. SDHC Class 6 memory cards must be used. (Class 6 refers to data rate: the higher the number, the faster it is. Many still camera SDHC cards are Class 4 or below. SDHC cards that are not up to class 6 specifications cannot be used with either the GY-HM100 or GY-HM700).

The GY-HM100 comes with an integrated high definition Fujinon 10:1 lens, f1.8, 3.7-37 mm. It has manual and automatic control of focus and iris. The lens is made with three aspherical elements and a new anti-reflection coating. A retractable cover is built into into the lens hood, eliminating the need for a traditional lens cap. JVC's Focus Assist displays the viewfinder or LCD image in monochrome with colored edges.

With tapeless recording to dual 64GB SDHC Class 6 memory cards, you have enough for up to 6 hours of continuous HD recording at 720p in SP mode (25 Mbps) and up to 3 hours, 20 minutes at 1080p in HQ mode (35 Mbps). The camera automatically begins recording on the second card when the first card is full.The cost per-minute of SDHC media is comparable to, or less than, professional video tape.

JVC developed a proprietary codec capable of providing highly efficient compression up to 35 megabits per second, with MPEG2 long GOP encoding. The Quicktime .mov files created in-camera can be dragged onto the NLE timeline without conversion or rewrapping.

The camera also stores files in what the specs say is an ISO Base Media File Format (.MP4), compatible with all major non-linear editing systems. We are advised to use the ProHD Log and Transfer Plug-in for Final Cut Studio to deal with these files but why would we if the .mov files are so much simpler and faster to deal with, and don't require rewrapping?

The audio recording features of the GY-HM100 include two channels of uncompressed LPCM audio with manual level controls and audio meter. Balanced XLR inputs with phantom power are provided on the handle for an external microphone and/or wireless receiver. A 2.8-inch LCD display, in 16:9 aspect ratio, provides a wide array of monitoring and setup information. There's an infrared wireless remote and you can capture 2 megapixel still images from either a live framegrab or from recorded video.

The GY-HM100 is scheduled for delivery in April 2009. For more information and high-resolution photos: www.pro.jvc.com/HM100



JVC GY-HM100

- Native Final Cut Pro .mov format
- Edit immediately without conversion or transcoding
- Choice of ISO Base Media File Format
- Compatible with all major non-linear editing systems
- Records to dual SDHC memory cards
- Full HD recording (selectable)
- Recording with selectable data rates up to 35Mbps
- 1920 x 1080 (1080p24/25/30, 1080i)
- 1280 x 720P (p60/50/30/25/24)
- Fujinon HD lens with manual or auto modes
- Optical image stablization
- 10:1 Fujinon Lens f1.8 3.7 37 mm
- Image customization modes (gamma, matrix, knee, detail, etc.)
- Uncompressed LPCM audio (2ch) recording
- Manual level controls with audio meter
- 3.1 lbs / 1.4 kg
- XLR inputs with phantom power
- details: pro.jvc.com/

