

American Motion Picture Society

home of the world's longest-running non-commercial film festival

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The World is ... GOING TAPE-LESS

an AMPS Movie Makers technical
special

There have been a number of questions about the future direction of video recording for the non-commercial movie maker. Earlier this year we looked at recording to SDHC cards and all that information has been collected here so that there is a single location for reference. This is a fast moving world so keep close to the Internet for updates and news of changes and developments.

Tape has served us well but its days are numbered as a new CoDec (the method of compressing information when we capture and decompressing when we play back) has arrived that can store large amounts of information in very small spaces. AVCHD (Advanced Video Codec High Definition) is supported by the major camera makers and the suppliers of editing software. It is rapidly replacing HDV, the tape based format that introduced us to High Definition Video.

A NEW BREED OF CAMERA

Tapeless cameras came in three flavors; recording to 8cm DVDs, to internal hard disc drives (HDDs) and to solid state media such as SDHC cards and the Sony Memory Stick.

The DVD systems are now pretty well extinct. Although they offered the advantage of instant play back in a DVD player they never really took off. The HDD cameras have succeeded and now offer large drives, for example this JVC camera has a 32 GB HDD that will hold 50 hours of HD video! My weekend in real time. The camera can be connected directly to a TV for viewing and the video/audio files can be extracted for editing via a USB2 connection. However, there are still moving parts and although HDDs are now very reliable the weight and transmitted sound are still there.

It is clear that the professional world has not taken to internal HDD recording but solid state cards are popular, high end Panasonic P2 and Sony SxS. At a level perhaps affordable by n-c film makers there are two interesting cameras that offer useful features.

The JVC HM 100 records to SDHC cards and can be set up to record in the QuickTime format which makes for direct file transfer into edit software such as FCP, FCE and iMovie. Or record in .mp4 for other NLE systems.



Sony DVD camera



JVC HDD camera



JVC GY-HM100



Panasonic AG-HMC 40

Panasonic call their low end professional system AVCCAM and have introduced a compact 3 chip camera that records AVCHD to SDHC cards and also captures stills at 10 megapixels. External hard drives have proven reasonably popular and can be set up to record in different CoDecs suitable for direct connection to an NLE system for immediate editing. They may be used simultaneously with tape recording so that a back-up is created.



Firestore FS-4

A New Breed of Camera



So far we have looked at traditional cameras, albeit using alternatives to tape. Now a completely new breed of video cameras has emerged. These are partly to meet the need for simple point and shoot cameras with minimal controls that can be slipped into a pocket or purse and also make it easy to upload short pieces to YouTube.

The originator of this class of camcorder seems to be Pure Digital with their Flip series, now in a third generation with both SD and HD models available. The most interesting in their current range is the Flip Ultra HD (\$199) which records 1280 x 720p 30fps using the AVCHD Lite CoDec. The 8 GB internal storage can record up to 120 minutes. It comes with its own simple edit software for both PC and Mac with an emphasis on settings for uploading to YouTube. Clips can also be edited with iMovie 9. There is a selection of accessories including a waterproof

casing (\$50) and additional power.

Once the Flip series was established then the traditional camcorder manufacturers jumped on board with offerings from Sony, Kodak, and JVC.

JVC have introduced their Piccio GC-FM1 which records 1440 x 1080 30p as .mov files, It also takes 8 megapixel still photographs. Sony have their Webbie series which clearly indicates what these cameras are intended for. There are also cameras from Aiptek with an extensive range and other suppliers, this is an expanding field.

Where do these cameras fit into the n-c film makers world?

For the mountaineer, rock climber, mountain biker, sky diver, skier , skate boarder and other vigorous sports enthusiasts these cameras will fill a niche as helmet-cams or attached to equipment. They are light, the Flip Ultra HD weighs 8 ounces so they could serve as sky cams mounted on model aircraft or helicopters. Here the cost of disaster is greatly reduced.



I must admit that the only edited results from these cameras I have seen have been on YouTube so it is impossible for me to comment on how well their shots will intercut with “full size” cameras. However, I did see shots that Harold Cosgrove had taken with his HD Aiptek and I was impressed with the results. Harold has also developed an attachment to take his wide angle lens and filters. (see MM Volume 18 No 2 2008).

Click here for more on *Going Tapeless...*

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