

The Competitive Advantages of Flash XDR / nanoFlash In Video Acquisition, Post, and Archival

Acquisition Advantages – Superior Video/Audio Quality

- High Bit-Rate Recording
 - Use 50/100 Mbps (Long-GOP) or 100/160 Mbps (I-Frame) instead of 19/25/35 Mbps (HDV/XDCAM HD) or 100 Mbps (DVCPProHD) for an overall quality improvement and reduced “mosquito noise”
 - Full-Raster Processing
 - 1920x1080i/p processing instead of 1440/1280x1080i/p (HDV/DVCPProHD) and 1280x720p as opposed to 960x720p (DVCPProHD) for improved horizontal resolution and reduction of jaggy lines.
 - 4:2:2 Sampling
 - 4:2:2 sampling in place of 4:2:0 (HDV/XDCAM HD) for improved color keying /compositing
 - Redundant recording capability (RAID1)
 - Simultaneously records identical data to two CF cards for automatic backup
 - Instant review of recorded footage
 - No need to rewind tape to review last clip; instantly ready to start next record session
 - No Drop-outs or Time-Code Breaks
 - These tape-based issues are eliminated with solid-state recording
 - Low cost Compact Flash Media
 - Transcend 133X 32GB Compact Flash cards (US \$150) are 1/10th the price of other professional solid-state media; 70 Mins@50 Mbps / 35 Mins@100 Mbps record capacity (per 32GB card); four CF card slots on Flash XDR, two slots on nanoFlash.
 - Unmatched Portability
 - Low-Power (10-15W), Small Size, Silent Operation (No Fans), Lightweight (under 3 lbs / 2Kg)
 - 24-bit PCM audio
 - Improved overall audio quality (24-bit PCM as opposed to 16-bit compressed)
- ⇒ **50 Mbps 4:2:2 acceptable to most major networks (BBC, Discovery, National Geographic, etc)**
- ⇒ **No longer need to rent/purchase acquisition deck**

Post-Production Advantages – Faster Workflow

- No digitizing tape
 - Video footage instantly accessible to NLE, no need to digitize, huge time saver!
 - 24p Pull-Down Removal
 - No need to remove redundant frames during edit; also increases CF-card record time.
 - Instant Post direct from CF cards
 - Multi-stream (4 streams @ 50 Mbps rate) editing direct from CF cards via daisy-chain of four Lexar FW-800 readers (total cost = US \$240). Portable hard-drive recorders and other solid-state cards are limited to single stream editing direct from the media.
 - MetaData support
 - Mark Take as “Good, Better, Best, Reject”. Record project data: event, date, director, on each clip.
- ⇒ **Eliminate digitizing and copying footage; quicker access to best clips**

Finished Project Archival – High-Quality Video on Long-Life Media

- High-Quality Finished-Project Archival
 - Record finished project directly from NLE timeline (via HD-SDI out) at 100/160 Mbps onto CF cards. Copy data file from CF card(s) onto Blu-Ray disk for long term storage, at quality levels above HD-CAM.
 - Archive 1 Hour of very high quality 100 Mbps 4:2:2 footage onto 50GB Blu-ray for US \$35
- ⇒ **No need to rent/purchase archival deck**