

ACCELERATED DELIVERY AND COST SAVINGS WITH APOLLO



Convergent Design



MULTI-CAMERA PRODUCTION REWARDS AND CHALLENGES

The use of multiple cameras can greatly enhance production quality. The ability to quickly switch from one subject to another, as well as introduce different perspectives, creates a far more visually engaging production. However, multi-cam adds significant complexities to on-set production and especially post-production editing. The Convergent Design Apollo was specifically engineered to reduce these complexities, enhance productivity and provide a very quick ROI (Return On Investment).

REDUCED ON-SET PRODUCTION COSTS

Current multi-camera shoots require data wranglers to swap out media cards from each camera, download these cards to a master drive and later create a backup drive. This process is detail oriented, tedious, and inherently error-prone, as there is no inherent visual indication that the data has been transferred from the card. Cards can easily be erased without data offload, causing a total loss of that footage. Overall, data wrangling increases the likelihood of these errors, while adding production costs.

Multi-camera (up to 4-cameras) production with Apollo virtually eliminates data wrangling. Apollo records all camera feeds onto a single SSD (solid-state drive), with the option to create, on the fly, an identical backup copy (HD only). No longer are data wranglers needed to retrieve and download media from the various cameras. No longer do production crews need to bring an array of different media readers to accommodate various cameras (SxS, P2, SD, CFast, etc). A single, low-cost USB 3.0 based SSD reader is all that is required. Measurable overtime and personnel cost savings can be quickly realized.



apOLLO
MULTICAMERA RECORDER/SWITCHER



ENHANCED POST-PRODUCTION

While Apollo-based on-set production cost savings is readily identifiable, the most significant savings are realized in post-production. Without Apollo, the use of multiple cameras virtually guarantees mismatched file names, creating additional work in post. Apollo always uses matching file names, with a simple extension (A,B,C,D) to indicate different cameras. It's now super simple to locate all the camera angles associated with a particular shot.

Matched timecode (TC) is another trouble area for multi-camera productions. Productions often utilize Lockit boxes on each camera, but this adds cost and complexity, often requiring a re-sync every few hours. Also, once a camera without a timecode input is added (such as a DSLR, mirrorless or POV) the Lockit box approach falls short. Setting all the cameras to use time-of-day TC will get you close (except for POVs), but inevitably some cameras will erroneously be set for record-run TC, nullifying those values. Apollo eliminates these offsets and errors by recording the exact same TC to each frame, regardless of the source (including POV). Cost savings are realized during on-set production (no Lockit boxes) as well as post-production.

MAKE LIFE SIMPLER

When a director yells "Roll cameras," it's impossible for all the camera operators to press their record buttons simultaneously. This creates starting frame offsets in each camera file. Apollo eliminates this nuisance, by always starting precisely on the same frame. Furthermore, some cameras (especially DSLRs and mirrorless) insert frame delays in their output. Apollo uniquely provides a simple mechanism to compensate for this delay, synchronizing the video and audio from all sources, saving valuable time in post-production.

PERFECTLY MATCHED

Camera color matching is also a constant concern in multi-camera production. Most productions utilize an array of different cameras. Color matching can be challenging, but mismatched cameras add significant post-production time and costs. Apollo's multi-camera vectorscope and waveform monitor greatly simplifies color and exposure matching by displaying side-by-side comparisons. White balance problems are immediately identified on the single monitor quad-split display of all cameras. Post-production corrections and adjustments are minimized, saving time and money.

Finally, the use of a common CODEC (Apple ProRes or Avid DNxHD), can eliminate the need for transcoding hours of footage from various cameras, saving time and costs.





ROUGH-CUT EDITING SAVES POST-PRODUCTION COSTS

Apollo clearly offers both on-set production (data wrangling) as well as post-production (pre-edit media searches, corrections and alignment) savings. Apollo additionally enables immediate rough-cut editing prior to post-production. Apollo uniquely records an independent fifth channel of the quad-split of all streams (with TC window burn) enabling producers to rough-cut edit the footage (during travel downtime, for example) prior to delivery to post. Alternatively, the fifth channel can be configured to record a live-switch output with EDL. Once again, valuable post-production time is saved, reducing costs and enabling faster turn-around.

APOLLO QUICK ROI

Let's analyze the potential cost savings and ROI using Apollo. The following are based on typical production time and costs (please adjust accordingly):

TYPICAL ON-SET PRODUCTION / POST-PRODUCTION SAVINGS	
DATA WRANGLER COST SAVINGS	\$250-\$500/production-day
POST-PRODUCTION COSTS SAVINGS	2-4 hours/production-day @ \$150-\$250/hr.
ROUGH-CUT EDIT SAVINGS IN POST	1-2 hours @ \$150-\$250/hr.
CONSERVATIVE DAILY SAVINGS	\$700-\$1000/Production Day

ROI = Purchase price / Savings per production-day

Apollo purchase price = \$2995; Projected cost savings = \$700/production-day

ROI = \$2995 / \$700

Apollo ROI = 4.3 Production days!!

SUMMARY

Shooting with multiple cameras significantly enhances production value, enabling the creation of far more engaging deliverables. However, multi-camera production brings additional costs, complexity, and potential for issues to both on-set production and post-production. Apollo mitigates these costs and complexities, enabling the creation of far more compelling deliverables, at moderate additional cost.

Accelerate delivery with Apollo and start enjoying enhanced productivity, fewer errors, and measurable cost savings on every shoot.

Find out more about Apollo at Convergent-Design.com/apollo

