ACES Project Checklist
Digital Imaging Technicians

This checklist is intended to help you organize your first couple of ACES projects, after which this should be second nature for you. Many of these steps you already do, so the emphasis here is to identify any ACES-specific questions you need to ask up front, and to suggest ways to get the answers.

Gather project-related data

- Key crew – Producer, Director, Cinematographer, Post Supervisor, Colorist (although they may not come on board until later) and DI Color Scientist.
- Key companies – Post facility, Lead VFX company, DI facility
- Client or distributor - Many studios and distributors are requesting or requiring that ACES be used in production and that ACES2065-4 files are delivered from the Final Master stage.
- Intended distribution medium (Broadcast, Internet, Theatrical, Streaming, etc.) - The more deliverables there are, the more likely ACES will be helpful.
- Camera preference for “A” camera and what other cameras might be used — Each camera on the shoot using ACES will need a device-specific Input Transform (sometimes referred to as an Input Device Transform or IDT). Ensure you are able to obtain Input Transforms for cameras in a form you can add to your application. Filmlight has additional camera profiles for their software available for download. For Resolve you will need to obtain or create extra Input Transforms using DCTL. Other ACES Product Partner companies may also have Input Transforms available. Ensure any custom Input Transforms are made available to be used further down the pipeline.
- Determine the level of on-set look management/color correction that is anticipated — sticking with ASC CDL-style adjustments is recommended; avoid complex “power windows” and secondary corrections as they are not easily communicated down the imaging pipeline. If you wish to use looks that go beyond ASC CDL by using proprietary formats such as Baselight BLG or Resolve DRX, fully test that a method is in place to apply these at every stage where they are required. Consider creating a "show LUT" Look Transform (sometimes called a Look Modification Transform or LMT) using more sophisticated tools, but restricting per shot adjustments to ASC CDL values, applied before the Look Transform. Save the Look Transform as a LUT and as a BLG / DRX.
- If possible, confirm with the finishing colorist whether ACEScc or ACEScct will be used in the final DI. The same ASC CDL values applied in the two different color spaces will give different results in the shadows, so consistency is important for accurately communicating a look. If an ACESproxy output from the camera is used, grades applied to this are only compatible with ACEScc. For this reason it may be preferable to use the camera’s native log output, even if ACESproxy is available, and apply an appropriate IDT in the live grading system.

Discuss the color pipeline for the project with key crew

- The decision to use ACES on a project can vary from project to project. If you want to be involved with the decision to use ACES, getting buy-in from the Producer, Cinematographer, VFX and DI house is important. Most of the larger VFX and DI house are well-versed in ACES, and many use it as the default color pipeline inside their facilities.
Pick your tools and their level of support for ACES wisely

• Most products from ACES Product Partners can be used reliably in an ACES color-managed workflow, and these companies provide a wealth of helpful information for their ACES users. If you’re required to use any products that have not yet incorporated ACES, check ACESCentral.com as there may be guidance there on how to use these products in an ACES-based workflow. Plugins such as OpenColorIO (OCIO) can often be used to implement ACES in software that does not support it natively, such as the Adobe suite. Alternatively LUTs can be created by ACES-supporting software and can be used elsewhere in the workflow. NOTE: such LUTs should only be for previewing or temporary versions, such as dailies, and should not be part of the finishing pipeline.

Discuss dailies and final encodes

• Determine who is doing the dailies. Typically a “look” will be burned-in and then passed to editorial and uploaded to dailies viewing platforms. The look is passed as metadata to VFX and Digital Intermediate using ACES metadata containers (ACESClip, CLF – both can carry ASC CDL data) that help communicate color information down the pipeline, although metadata support is not fully implemented in all tools yet. Ensure that the tools you are using generate color metadata in a form which can be read further down the line. Also, choose the most current version of ACES as long as it is implemented in every application in the pipeline and ensure all parties use the same version.

Manage the hand-off and test prior to production

• As with any production pipeline, it’s the places where files and metadata are passed between people and companies that offer the greatest chance for error or miscommunication. If possible, conduct a test run of dailies and other encoding prior to production.

Further Learning

• Help educate crew-members who don’t know about ACES. The ACES Primer is a great place to start, as is the ACES Overview which accompanies this document. And ACESCentral.com has the latest information on ACES benefits and workflows.

• Take a look at the workflow diagram which shows how ACES overlaid onto the various components of a modern scene referred workflow.

• It may be helpful to study some of the other Quick Start Guides in this series, so that you are clear on how others will be working with the images and metadata you create. You don’t need to be able to do everybody else’s job, but understanding what their jobs entail will help you do yours better.

If you have additions to this list that you think would be helpful, please contact us at aces@oscars.org

Also, please share your ACES experience, tips and tricks for others on ACESCentral.

Have a great shoot!