

SpeedGrade OnSet 2011

User Guide

IRIDAS.

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Credits

This documentation includes images from Angle Mort, Courtesy of Caramel Films, Saigon Eclipse (thanks to Jo Nguyen), The Eagle Hunter's Son, courtesy of Stromberg Productions. Additional images from Erwin Van Der Stappen and Kadenza Media

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User Guide Part 1: Introduction

Introduction:

How SpeedGrade OnSet Works

SpeedGrade OnSet is first and foremost a communications tool. It allows filmmakers to establish and share creative looks as simply and effectively as possible.

Establishing the .Look

SpeedGrade OnSet is not about turning cinematographers into colorists; nor will most cinematographers spend their time on set doing grading. The value of SpeedGrade OnSet will probably become most obvious during preproduction when you are designing the visuals for the film. With SpeedGrade OnSet you can establish overall looks for a project, including various scenes or settings, long before the campaign begins.

Using the .Look

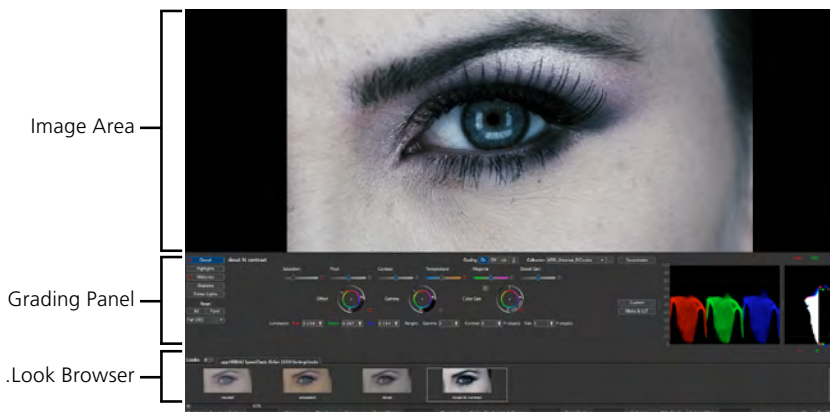
Once created, your looks can be applied in various ways (as .Look files or exported as LUTs), for example to provide graded dailies during production. Looks will allow you to match live action shots with miniatures or green screen shots for VFX sequences. They will also allow the second unit to ensure that their shots match the principal photography. Of course, your .Looks remain fully editable. You can save "master looks" for example to copy and adjust for individual shots whenever you need to.

Communicating the .Look

Moving on from production, your looks will be available to the editor and anyone else in post, long before color timing and film finishing. And, when it's time to do the final grading, your colorist will have clear references directly from you to work with. SpeedGrade OnSet integrates seamlessly with IRIDAS' other SpeedGrade and FrameCycler applications, and the LUT export functionality provides for color continuity in a wide variety of filmmaking workflows.

SpeedGrade OnSet at a Glance

The main SpeedGrade OnSet interface consists of three parts: the image area, the grading panel, and the .Look browser.



Buttons on either side of the grading panel open specific tools to adjust things like Highlights or Secondaries. The Look browser provides access to stored .Look files.



User Guide Part 2: Installation

Installing SpeedGrade OnSet

Extract License File

Licenses are packaged as zip files and sent to you by email. Before launching the installer, you need to place the license file on your desktop.

1. Delete any previous license files on your desktop.
2. Drag the zipped license file from the email to your desktop.



3. Double-click the zipped file to extract the license (license.irlc). Windows users: drag the license file from the Zip window to your desktop, then close the Zip window.

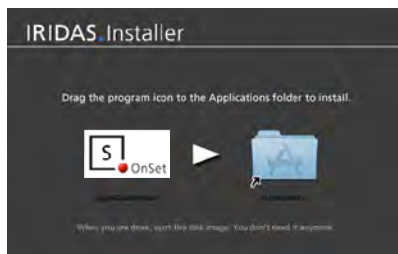
Mac OS X Installation

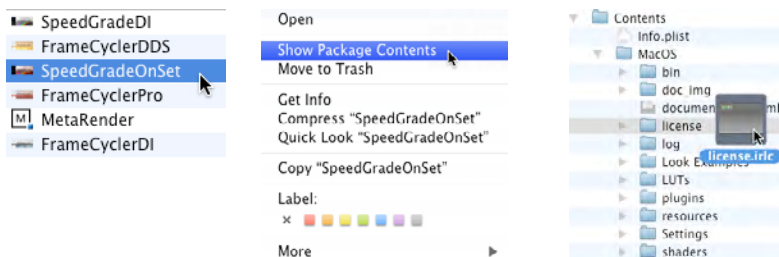
Step 1: Download and Install

Download the Disk Image (.dmg) to your desktop and mount it with a double click. Follow the prompts in the installer.

Step 2: Activate Your License

Note: If you have downloaded a trial installer, you can omit this step. All trial downloads have a valid license included.





- Navigate to your Applications folder and find SpeedGrade OnSet.
- Right-click (or Ctrl+click) on the product icon
- Select "Show package contents" from popup menu and new finder window will open
- Double click on the contents folder to open it. Then open the MacOS folder.
- Then copy or drag and drop your license file (license.irlc) into the license folder found there.
- Close finder window

Step 3: Launch SpeedGrade OnSet

To launch your product, click the icon in the Applications folder, or create an icon for the dock and launch it from there.

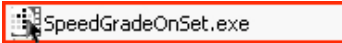


Windows Installation

Step 1: Download and Install

Download the setup executable to your computer.

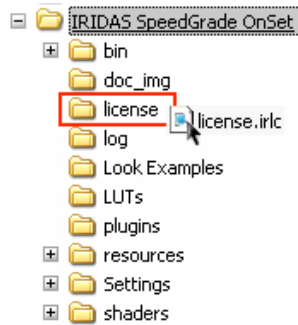
Double click on the setup executable and follow the instructions on the screen.



Step 2: Activate Your License

Note: If you have downloaded a trial installer, you can omit this step. All trial downloads have a valid license included.

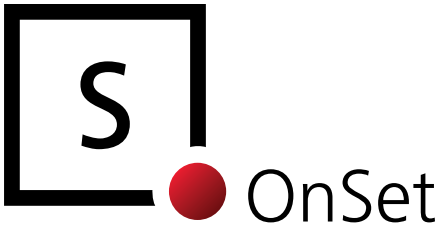
- Copy the license file that has been sent to you via email to an empty folder and extract it there.
- Open an Explorer window, then navigate to your Program Files folder and find your product
- Then copy or drag and drop your license file (license.irlc) into the license folder found there.



Step 3: Launch SpeedGrade OnSet

To launch your product, click on the start menu, click on All Programs, open the IRIDAS entry and find the submenu with your product.





User Guide Part 3: Technical Specifications

Technical Specifications

Universal RAW Support

SpeedGrade OnSet supports the following digital film camera formats:

ARRIRAW Alexa v3 (.ari)	Fully certified ARRIRAW color science. Output LUTS for Rec709 EE and P3 incl.
ARRI D21 S.Two RAW (.dpx)	The ARRI D21 RAW files recorded on an S.Two Digital Film Recorder (.dpx file extension) are supported. To enable the ARRI .dpx RAW files open the settings dialog, select File Formats and toggle the checkbox for SMPTE DPX / ARRI D21 RAW.
Cineform (.avi/.mov)	
DALSA Origin 4K RAW (.dpx)	
Ikonoskop A-Cam	Supported via CinemaDNG
Phantom HD/4K (.cine)	For older Phantom RAW files with the .cin extension, enable the corresponding flag in the File Formats tab of your user settings.
REDCode RAW (.R3D)	SpeedGrade supports R3D via the RED SDK. Dynamic Qualities allow for adjusting playback parameters such as resolution to achieve real time playback.
Silicon Imaging SI 2K/SI Mini (Cineform RAW .avi/.mov)	Includes matrix and .Look metadata support.
Silicon Imaging SI 2K/SI Mini (Uncompressed .siv)	Includes matrix and .Look metadata support.
Weisscam HS-1 RAW (.wcr)	Support for .wcr
Weisscam HS-2 RAW	Support for .wcr and a subset of the DM2 Digimag

ARRI Alexa Support

SpeedGrade supports all formats recorded by the ARRI Alexa, including ARRIRAW and ProRes 4444, in 12 bit.



ARRIRAW format acquired with disk recorders writing .ari

ARRIRAW is debayered natively using ARRI's color science. All in-camera settings are applied automatically.

ProRes 4444 recorded with SxS cards

SpeedGrade NX reads ProRes files on both OS X and Windows 7. The files are decoded at original bit depth, maximum quality for all additional processing is ensured. Please be sure to use the latest certified Quicktime for OS X or Windows:

http://doc.irdas.com/index.php/Quicktime_Codecs

Output Transform LUTs

ARRI provides LUTs for the Alexa in various formats. IRIDAS has tested and certified the set of LUTs designed for use with Shake. You can download the LUTs from ARRI directly.

ARRI D21 Support

SpeedGrade OnSet supports all formats recorded by the ARRI D21.

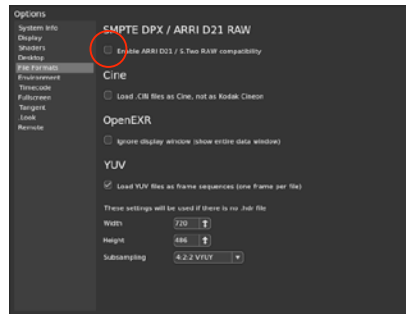


RAW format acquired with disk recorders writing .ari

This format can be loaded into SpeedGrade OnSet directly.

RAW format acquired as .dpx RAW using S.TWO disk recorders

The RAW files recorded with S.TWO systems are using the DPX container to place RAW data into it. This format is a special use of the .dpx format and requires a change in the SpeedGrade OnSet settings. Open the Settings Panel, select File Formats, enable the checkbox for D21 DPX support.



Note: you can't mix regular RGB DPX files with files recorded as ARRI RAW .dpx

To work with regular DPX files make sure to disable the checkbox for D21 RAW

Exposure and Matrix presets for .ari and .dpx RAW

SpeedGrade OnSet provides presets with Matrix and exposure settings designed by ARRI. These presets are in the default folder for .Looks in the subfolder called D21. They are in .look format, you can apply them via the .look browser (see the chapter on working with .looks)



Silicon Imaging S12K Support

SpeedGrade OnSet supports several formats recorded by the S12K.

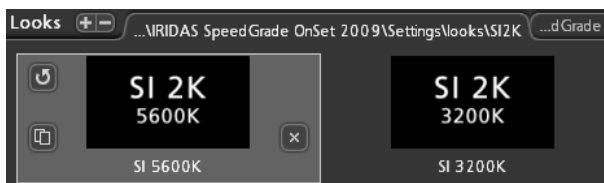
Cineform RAW HD/2K

This format can be used directly without loading additional software or adjusting settings parameters. The Cineform NeoPlayer is not required for working with these files in SpeedGrade OnSet.



White Balance and Matrix presets for S12K Cineform RAW

SpeedGrade OnSet provides presets with Matrix and White Balance settings for the Cineform RAW files designed by Silicon Imaging. These presets are in the default folder for Looks in a subfolder called S12K. They are in .look format, you can apply them via the .Look browser (see the chapter on working with .Looks)



Tip: Set Presets to read-only

To prevent .Look presets from getting altered accidentally, set the file attributes of the .Look presets to read-only in your file browser. To base a new .Look on a preset, simply click on the copy icon that appears when you hover with your mouse over a .Look preset. This creates a new look and leaves the preset unaltered.

S12K .siv RAW

This new format records uncompressed RAW files. SpeedGrade OnSet can directly open .siv files. White balance info is automatically applied.

.look files recorded with the camera are interpreted automatically if they are in the same directory as the shot itself. If you want to keep the white balance but set all grading settings to neutral, click "reset all" in the grading panel.

Phantom HD, FLEX and Phantom 65 Support

SpeedGrade OnSet supports all formats by Phantom recorded as .cine. This includes the Phantom HD, the Phantom FLEX and the Phantom 65.



Phantom .cine RAW

This format can be used directly without loading additional software or adjusting settings parameters.

White balance presets

SpeedGrade OnSet reads and applies white balance info recorded with all current Phantom cameras (starting with firmware Ph 670).

RED Support (RED ONE / RED EPIC)

SpeedGrade OnSet supports files recorded with the RED ONE and the RED EPIC via the RED SDK.



Working with R3D Settings

You can work with original settings based on each clip's metadata or replace all image adjustments with a global default. Both can be accessed via the settings panel. Open it by clicking on "Settings" or just press "S" on your keyboard. Then select "R3D".

For fast turnaround on dailies, it is recommended to set the application to work with settings stored in each clip. This is the default value.

When switching to manual settings, all R3D files will be interpreted according to what you set on this page. This is recommended in order to base your .looks on a specific color science. It will help to ease shot matching when in-camera settings differ widely throughout production.

Note: All the settings can be changed on the fly. You can also safely switch between the manual and the default setup, this won't change your files but only the way they get processed for display. The settings that are active when you commit a render job will define how the images are treated for rendering.

General File Format Support

Additionally to the various RAW formats SpeedGrade OnSet reads the following industry standard file formats:

Format
Cineon (.cin)
DPX, DPX 2.0
Targa (.tga)
TIFF
Pixarlog TIFF
Floating Point TIFF
Maya IFF
Lightwave IFF
Softimage PIC
Wavefront RLA
Windows Bitmap
Gif
Jpeg
YUV
OpenEXR

Calibration LUT Support

SpeedGrade OnSet supports the following industry standard file formats for calibrating your display:

Manufacturer	Product	Format	LUT Node Depth
ARRI	ARRI CMS	.cube	various
FilmLight	Truelight	.lut	16x16x16
Kodak	KDM	.3dl	various, only without encryption
Rising Sun Research	Cinespace	.cube	various

To add a calibration LUT to your SpeedGrade OnSet installation simply copy the LUT to the LUTs folder in your SpeedGrade OnSet folder on your local hard disk. It will show in the Calibration menu on the timeline after relaunching the application.



Calibration ARRI_Universal_DCI.cube ▾ ...

If you use a LUT applied in your display hardware, it is not necessary to apply a LUT within SpeedGrade OnSet. In case you use multiple displays it is recommended to leave the calibration LUT section blank and use hardware calibration for each display instead. Cascading LUTs is not recommended in order to avoid decreasing bit depth.

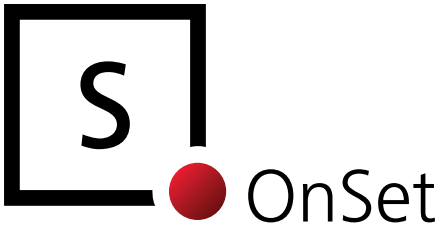
Tip: Use LUTs with either 8x8x8 or 16x16x16 nodes

Calibration LUTs usually shouldn't apply radical transformations of your color space, therefore a smaller number of nodes are precise enough for accurate interpolation of the target color space. 16x16x16 is a good compromise between performance and accuracy if you apply it in software. SpeedGrade OnSet supports up to 256x256x256 nodes, but this would decrease performance on the system and wouldn't improve accuracy noticeably.

Export LUT Support

SpeedGrade OnSet supports the following industry standard LUT formats for exporting your Looks for use with other systems:

Manufacturer	Product	Format	LUT type
BlackMagic	HD Link	.txt	1D
DVS	Clipster	.lut	1D
Sony	SRW	.lut	1D
S.Two	Various	.xml	1D
FilmLight	Truelight	.lut	3D (16x16x16)
Thomson	LUTher	.lut	3D
Autodesk	Various	.3DL	3D



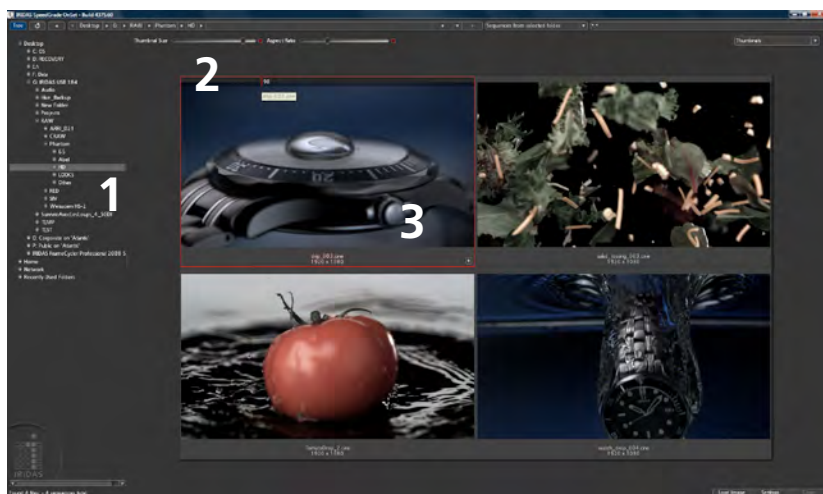
User Guide Part 4: Quick Start

Quick Start

Step 1: Loading an Image

SpeedGrade OnSet opens automatically to the Browser Desktop where you can find and open the image you want to work on. At any other time, you can click on the Desktop button to return to the Browser Desktop.

1. Navigate to the folder containing your images. You can do this with the path control or by enabling the file tree browser (click "Tree" to activate).
2. Drag the Thumbnail Size and Aspect Ratio sliders to adjust the size and number of images which are viewable in the browser.



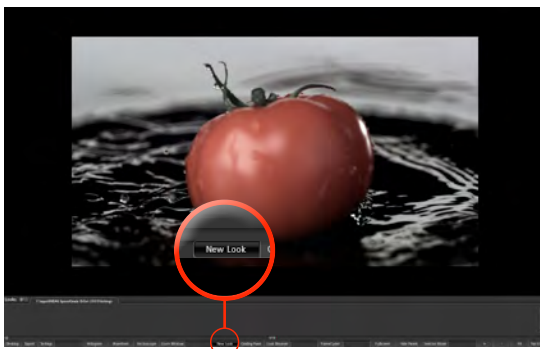
3. Click on Load Image (or just double-click on thumbnail) to open it.

Tip: Scrubbing Sequences

If you have a sequence of frames or RAW files, you can scrub through it by dragging left or right at the top of the thumbnail. When you find the frame you want to use, double-click on it.

Step 2: Choose Your LUT Format

When you have an image ready to work on, click on the "New Look" button to start. The Overall grading panel appears. This is where you will apply the majority of your adjustments.



The first time you open SpeedGrade OnSet, this is what you see. Click on the "New Look" button to begin

But First...

Before you begin, determine whether you will work with 1D or 3D LUT compatible Look Design. A 3D LUT enables a full range of adjustments including saturation and secondaries. A 1D LUT only allows simple primary adjustments.

The choice of LUT is determined by how the LUT will be used.

1D or 3D LUTs?

A number of hardware devices such as the S.Two digital film recorders require to work with 1D LUTs. If this is the final output format you need, select Simple (1D) from the dropdown. Note: you cannot adjust saturation values in 1D LUTs!

Other LUT formats, including SpeedGrade .Look files, FilmLight LUTs and the LUTher binary format are 3D LUTs and therefore can include any color adjustment applied in SpeedGrade OnSet.

Note: To stay compatible with the ASC algorithm standards, you need to select the 1D option. Each .Look file contains the values for the ASC algorithms in the <ASC> section of the file.



3D LUT Grading Interface:

Primaries are to the left (Overall, Highlights, Midtones, Shadows, Printer Lights)
 Secondaries and Custom Effects are to the right

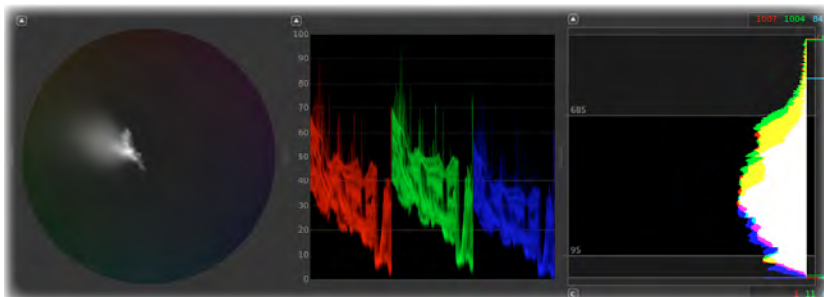


1D LUT Grading Interface:

The interface is reduced to Primaries only, no slider for saturation

Step 3: Turn on SpeedGrade's Scopes

SpeedGrade OnSet provides a variety of tools for checking your image. **Histogram**, **Vectorscope** and **Waveform** are part of the SpeedGrade OnSet panel, use hotkeys to activate or deactivate.



Vectorscope

Press < V >

Resize by dragging the handle to left or right

Waveform

Press < W >

Resize by dragging the handle to left or right

Histogram

Press < H >

Resize by dragging the handle to left or right

Step 4: Overall Grading

All of the tools you will need for primary color grading are available from the left part of the grading panel. As you start with a New Look the **Overall** grading panel is selected (highlighted blue). For correcting primaries in more detail you can additionally choose to work with **Highlights, Midtones and Shadows**.

Example for Overall Grading: Balancing Black and Whites, Adjusting the Gamma

1. Balancing the Blacks

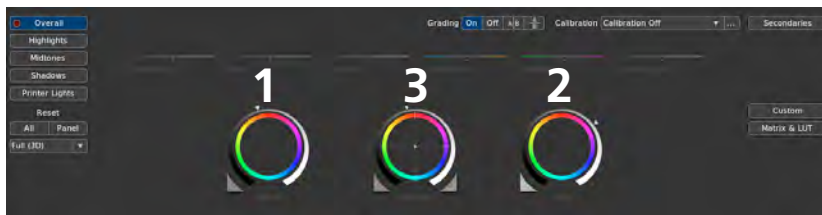
To adjust the blacks, right click (OSX: CTRL click) on the Offset color wheel to activate virtual trackball mode. Use the scroll wheel to adjust the dial until the blacks look the way you want them to. You can also adjust the dial by moving the mouse up or down while holding down the left mouse button. When you adjust the Offset, you are shifting the color values up or down to find the right black point. Right click (OS X: CTRL click) on the Offset color wheel again to turn off virtual trackball mode.

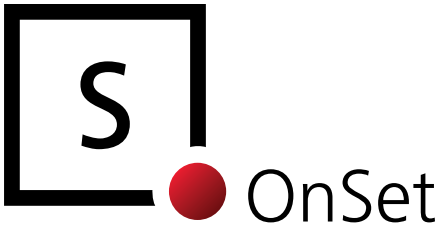
2. Adjusting the Whitepoint

Now apply the same adjustments to the Color Gain wheel to balance the whites. When you adjust the Color Gain, you are shifting the upper end of the white point values. If you move the axis point (center point in color wheel), you can adjust the color value of the white point.

3. Adjust the Gamma

Once the blacks and whites are where you want them to be, you're ready to adjust the gamma curve. Put the Gamma color wheel into virtual trackball mode and adjust the axis point and the overall value (with the dial) to get the look you want. When you adjust the Gamma, you are adjusting the contrast of the image. The gamma function multiplies values to make the color intensity greater or less.





User Guide Part 5: Working with .Looks

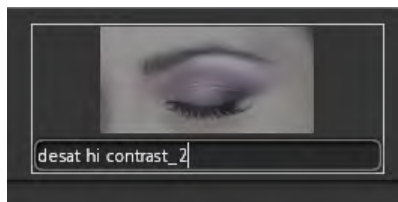
Working with .Looks

SpeedGrade OnSet automatically saves color grading information as .Look files. These files are only a few kilobytes so they can easily be exchanged with others, such as the director, VFX supervisors etc.

.Look files can be applied and viewed in all current versions of IRIDAS SpeedGrade and FrameCycler. They can also be used with MetaRender to apply preliminary looks to offline editing files.

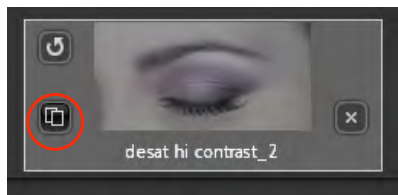
Naming .Look Files

Click on the current name (which will be “Unnamed” if the .Look is new). Type in the name and hit < **ENTER** >.



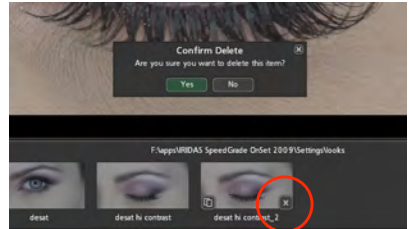
Base a new .Look on an existing .Look

Mouse over the .Look. Click the copy icon, a new .Look will appear at the last position in the .Look browser.



Deleting .Look Files

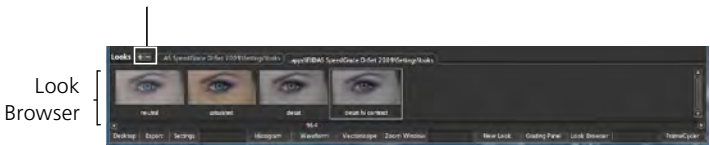
Mouse over the .Look. The delete icon appears on the right of the thumbnail. Click on the delete icon and then confirm (or hit < **ENTER** >).



The .Look Browser

The .Look Browser can be used to organize .Look presets. The default location for the first tab in the .Look browser is ../SpeedGrade OnSet/Settings/Looks. You can copy .Looks already generated into this folder, they will show up next time you open the application

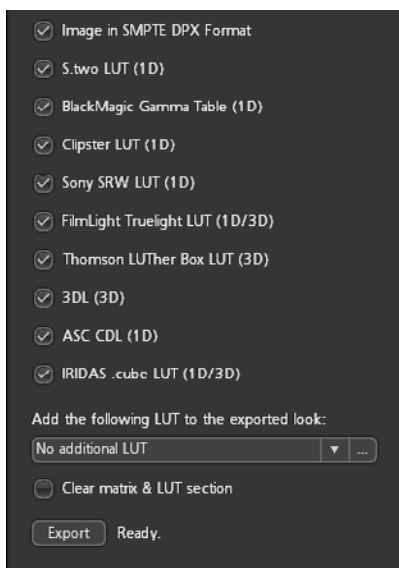
Click on the plus or minus signs to view or hide additional folders in the browser



LUT Export

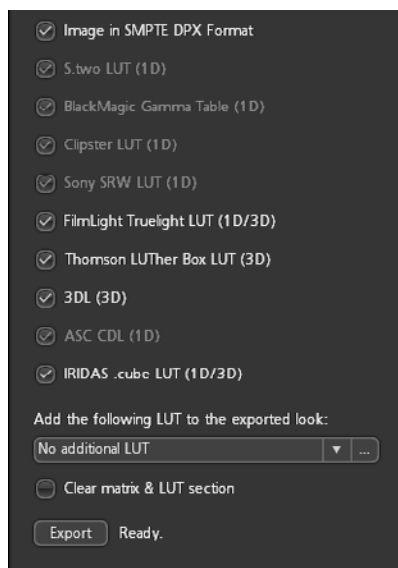
SpeedGrade OnSet includes an export function that allows you to create various LUT formats that can be used with other systems. To open the export selection menu, press the Export button in the main menu bar.

The export can be done any time, but it is recommended to immediately do an export of a .Look you know you want to keep. The export is saved as .zip package. It always includes a copy of the original .Look file and a reference frame as jpg. Additionally you can save to all LUT formats described in the technical specifications, check with the post production house which format is accepted. If in doubt, save all formats that SpeedGrade can export to. Note: this will increase the size of the .zip package to approx. 17 MB. If you need to keep the size of the export LUT package as small as possible, deselect the export of the SMPTE DPX reference frame (first option in the export menu).



Export menu, 1D and 3D LUT output

If you've chosen to stay compatible with 1D output, all formats will be available.

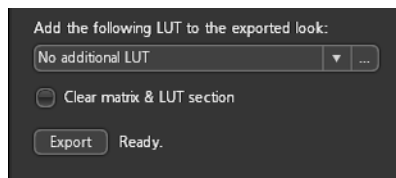


Export menu, 3D LUT output

If you've chosen to work with a range of tools that require a 3D LUT, the export menu automatically disables 1D formats

The export menu allows for adding the calibration LUT to the export package. Click on the pull-down menu to select the LUT of choice.

Use “the Clear Matrix & LUT” checkbox if you want to separate your creative .Look decision from the technical part (helpful when working with D21 presets for Matrix and Exposure)



The LUT saved as part of every .Look file

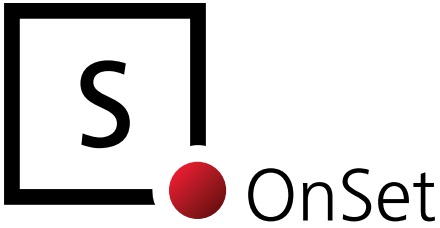
The IRIDAS .Look format includes the full set of parameters required to reproduce the grading settings at any other position along the same project or a even a different project (or on a different workstation). Therefore an additional LUT is not required to communicate .Looks as long as you're using IRIDAS products.

3rd party products such Digital Fusion by Eyeon or the Cinemage by Cine-tal require a LUT to be able to interpret the values you designed with your .Look. Therefore each .Look includes an additional LUT inside the same file. This eliminates the need to export to other formats.

The LUT size

In order to keep the .Look files as small as possible the 3D LUT inside the .Look has a size of 8x8x8. This is usually precise enough for all primary color changes. If you need a more detailed LUT you can change the size of the LUT that gets stored with every new .Look. To change it to 16x16x16 or 32x32x32 or 64x64x64 open the Settings in SpeedGrade OnSet, select .Look to the left, select the size you want to apply from the pull-down.

Tip: If you don't intend to work with 3rd party products don't change the default LUT size. Increasing the size to 64x64x64 will result in a .Look file in the range of 6MB, whereas a typical .Look file with 8x8x8 LUT (default) is only few hundred KB.



User Guide Part 6: The Grading Panel

Working with the Grading Panel

The Grading Panel offers tools for primary and secondary grading. Additionally you can select from custom effects which include simulations for chemical processes as well as numerous tools to help the creative part of the grading process.

Grading Panel Basics

Virtual trackball mode

Allows for finer controls: mouse movement adjusts colors; scroll wheel adjusts outside master dial. To activate and deactivate this feature, right click on the color wheel.

Master dial

Adjust overall values for this color wheel

Axis point

Adjust color values here



Tip: Use a Physical Trackball

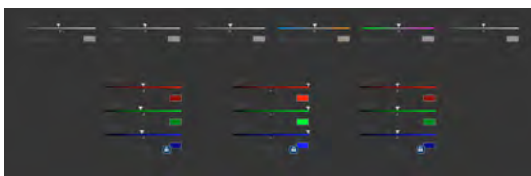
Virtual trackball mode works very well with a real trackball: the feeling is similar to a control panel except for interactive control of several elements at once.

Tip: adjust the sensitivity for virtual trackball mode

The sensitivity in virtual trackball mode can be adjusted easily from within SpeedGrade OnSet. Simply open the Settings, then select "Environment". Change "Speed reduction ratio" to adjust regular speed (default is 0.01), change "When Shift key pressed" (default is 0.1) to use a different ratio when holding down Shift while you're using virtual trackball mode.

Alternating Grading Selector Modes

You can switch the main color controls between **color wheel**, **slider**, and **numerical value** controls. To switch modes push < SHIFT > + < ENTER >.



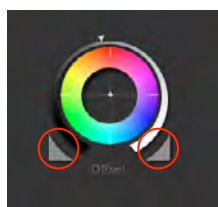
Sliders



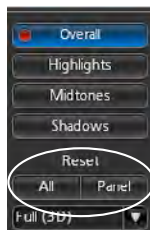
Numerical values

Reset Buttons

The reset buttons next to each slider and color wheel appear as soon as you start changing values. Each reset button allows for performing a reset to default values. The Tangent CP200 series and the Wave Panel offer a button next to each selector. Hold down a button to reset a value.



To perform a reset of all values of the current selection (in the example to the left "Overall", highlighted in blue), click on Reset All. To reset all changes click Reset All.

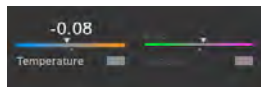


Extending Range Presets

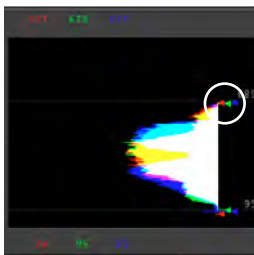
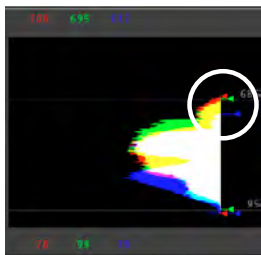
All Primary Grading Panels (Overall, Highlights, Midtones, Shadows) and the Secondary Grading Panel use default values for all ranges. For Offset, Gamma and Gain, the default is 1 F-Stop. The range value will automatically get extended if you use the controls beyond default values.

Alternate Way for Balancing Whites

The white point can be adjusted with the temperature and magenta slider instead of using the gain dial. This can be very efficient when working with the Histogram.



1. Open the Histogram (push < H > to activate).
2. Start balancing the whites with the Temperature slider. Push it to the left or to the right until the indicators for maximum red and maximum blue overlap.
3. Now balance maximum green against both maximum red and blue by shifting the Magenta slider until all three indicators overlap.



Working With Highlights, Midtones, Shadows

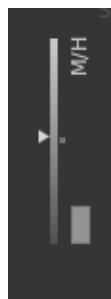
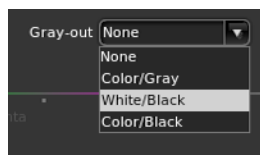
To fine tune details in Highlights, Midtones and Shadows you only need to click on the buttons to the right of the grading panel. The currently selected panel button is highlighted in blue. Once you make changes in any of the panels, a red dot will appear on the selector button. This will help you to keep track of changes applied already. There is no preferred order of operations since SpeedGrade OnSet works non-destructively.

To switch between Overall, Highlights, Midtones and Shadows on The CP200 BK, use

- [F1] Overall
- [F4] Highlights
- [F5] Midtones
- [F6] Shadows

Example for Working with Highlights: adding more texture to the sky

1. Start with Overall Grading to achieve a base look
2. Select Highlights. To see which part of the picture is currently accessed through the Highlights Panel click on the Gray-out Pull-down. You can choose from 3 different ways to show the selected colors. Which one works best depends on the image content, White/Black is usually a good preset to start with.
3. Fine tune the range for Highlights while you're in Gray-out mode. Move the slider to the left of the dials up or down to increase or decrease the range for Highlights. Move it up to select a smaller range, move it down to select more range towards Midtones.





Left: uncorrected image
Right: Gamma, Gain and Offset adjustments to show more detail in the sky.



Gray-out modes show the area affected by the High-lights Panel

Grading Secondaries

Adjustments can be applied to up to 6 custom color ranges per clip

Use Gray-out to see selected color range



The Range Selector

Start by selecting a color range preset. This will open a 15 degrees vector in the Hue Selector and full Luminance and Saturation Range.

If none of the 6 standard vectors seems to be a good starting point, click on the gray button at the right to bring up additional color ranges.

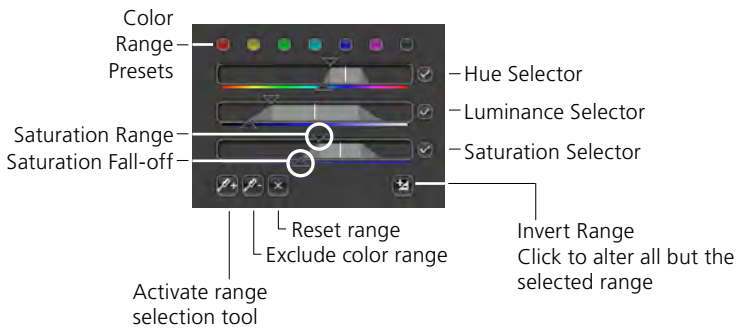
Alternately, click on the range selection tool and click on a range in the image.

Hold down the left mouse button over the color range in the image you'd like to select, move it until you're satisfied with the selected range.

Drag triangles above and below each slider to adjust range and fall-off.

Uncheck individual Selectors to key in on just one value.

Tip: if you need a luminance key, uncheck the Hue and the Saturation Selector. Continue with selecting range and fall-off on the Luminance Selector.

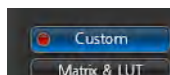


Custom Effects

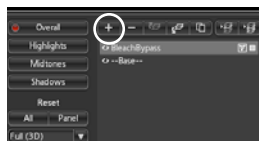
Custom effects and special shader functions are accessed here. These can be placed like filters above (or below) all grading (called "Base").

Adding a Custom Effect

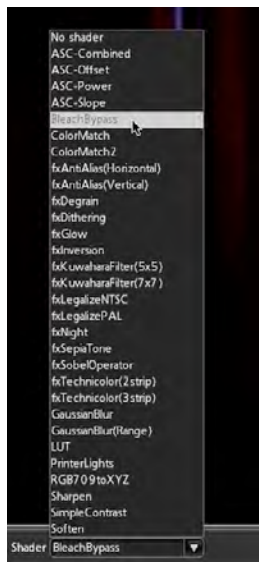
1. Click on the **Custom** button to bring up the custom shader panel.



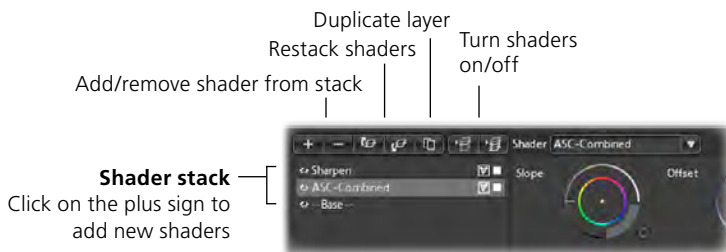
2. Click on the plus sign (+) above the **shader stack**. Click on the **shader dropdown menu (3)** and select the shader you want to use (Bleach Bypass in the example to the right).



3. The corresponding shader panel opens and you can apply adjustments to the image.



Working with the Shader Stack



Select each shader to bring up the corresponding grading panel. Shaders act like filters, affecting the layer (or layers) below. You can move selected shaders up or down in the stack to change the order.

To make adjustments to the Base shader, click on the buttons for primary or secondary grading.

The Custom Shaders

Effects

- BleachBypass
- Antialias
- Degrain
- Dithering
- Glow
- Inversion
- Kuwahara Filter
- Night
- Sepia Tone
- Sobel Operator
- Technicolor 2-Strip
- Technicolor 3-Strip
- Gaussian Blur
- Sharpen
- Soften

Utilities

- ColorMatch
- ColorMatch2
- Legalize NTSC
- Legalize PAL
- LUT
- Printer Lights
- Simple Contrast

ASC Shaders

- ASC-Combined
- ASC-Offset
- ASC Power
- ASC-Slope

Matrix & LUT

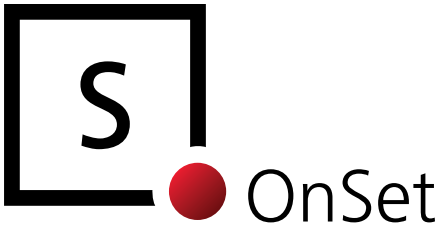
This section is used to apply data that's required to accurately reproduce color when working with RAW image data. SpeedGrade OnSet includes presets for the ARRI D21, Phantom HD/65 and the Silicon Imaging SI2K. You'll find the folders for the .Look files under settings/looks/

Further info on how to use the presets is available as part of a video tutorial for the SI2K:

http://doc.irdas.com/index.php/SI2K_and_SpeedGrade_XR



.Looks for ARRI D21: SpeedGrade OnSet can reproduce camera matrix data and exposure LUT. Choose the .Look according to your original exposure.



User Guide Part 8: Tangent CP200 and Tangent Wave

Tangent CP200 and Tangent Wave

Both Tangent control panels offer control over a wide range of SpeedGrade OnSet features. Please refer to the following pages to learn about setup and workflow.

Control Panel Setup

The Wave is USB powered and works plug and play.

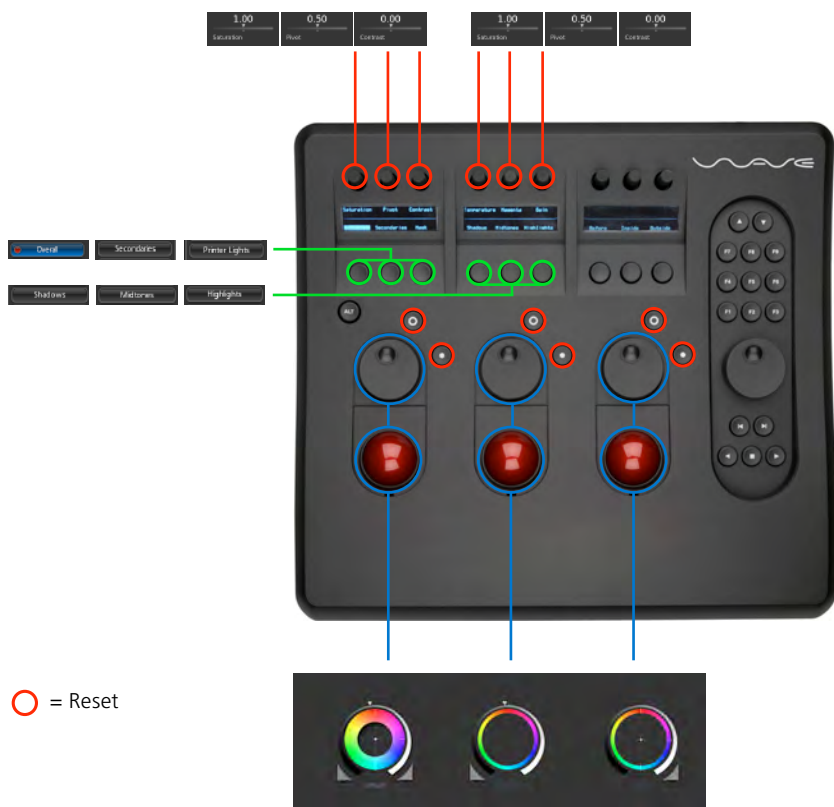
The CP200-BK requires an ethernet connection as well as external power supply. You will need the following:

- Tangent CP200 BK panel with Firmware 4.4 or higher
- Tangent Power Adapter
- Ethernet cable to connect the Tangent to your laptop or workstation

The step-by-step installation guide is available at

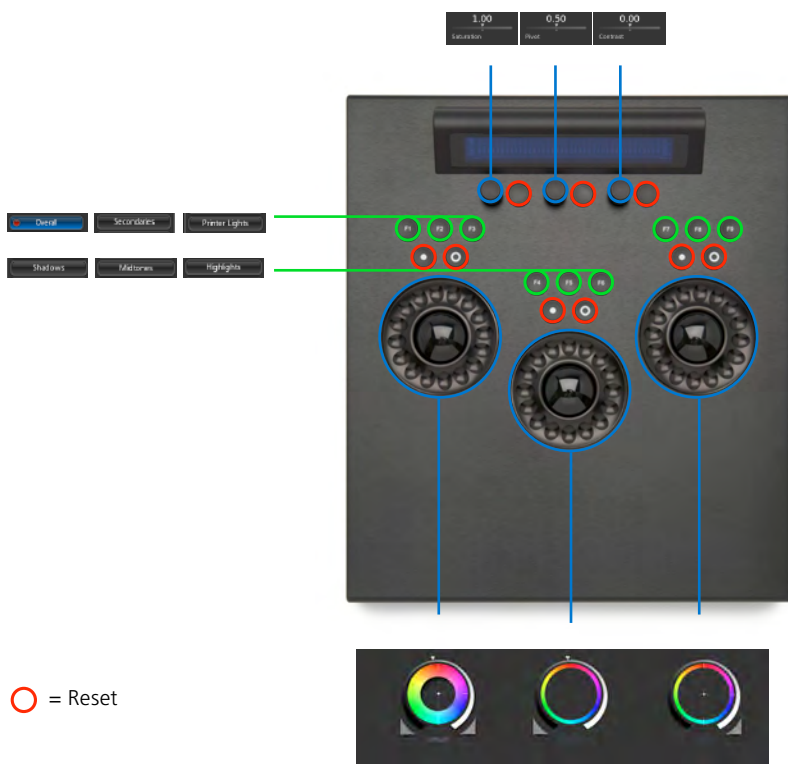
http://doc.irdas.com/index.php/SpeedGrade_OnSet:_Tangent_CP_200_Setup

Tangent Wave Features



Tip: If you'd like to speed up operations on the rotary encoders or the trackballs just hold down ALT. Once you release the ALT button speed is back to normal. To adjust the overall sensitivity of trackballs, rings and knobs, open the settings, select Tangent, scroll down to the Controls section. Increase or decrease the sensitivity as needed.

Tangent CP200-BK Features



Tip: To adjust the overall sensitivity of trackballs, rings and knobs, open the settings, select Tangent, scroll down to the Controls section. Increase or decrease the sensitivity as needed.

SpeedGrade OnSet Hotkeys

Application Hotkeys

Settings	< S >	Shows or hides the settings window
Desktop	< D >	Shows and Hides the Desktop
Close	< ALT+F4 >	Closes application
Fullscreen	< ALT+Enter > or < F >	Switches fullscreen mode on or off
Grading	< Numpad 0 >	Hold down to turn off grading

Zoom View Hotkeys

Zoom In	< Numpad + >	Increases the zoom level.
Zoom Out	< Numpad - >	Decreases the zoom level.
Zoom to Fit	< CTRL+Home >	Adjusts the zoom level so the entire image fits on screen.

Analysis Tools Hotkeys

Toggle Histogram	< H >	Shows or hides the histogram
Toggle Waveform	< W >	Shows or hides the waveform
Toggle Vectorscope	< V >	Shows or hides the vectorscope
Toggle Zoom Overlay	< Z >	Shows or hides the zoom overlay window.
Toggle Zoom Overlay Follow Mouse	< SHIFT+Z >	Switches the follow mode on or off for the zoom overlay window.

Appendix A: Desktop Elements



Toggles the tree view



Refresh tree view



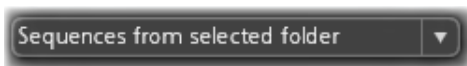
Go up one directory



Breadcrumb navigation: Click on an arrow to see all folders on the same path level. Click behind the last entry to manually edit the path.



Navigation history



Path search criteria: search one folder level only or browse folder and subdirectories



Search Criteria.
Default is *.*



Thumbnail Size. Drag slider to the right to enlarge thumbnails on the desktop



Aspect Ratio. Drag slider to the right or the left to adjust the thumbnails to the aspect ratio of your project.