

ultimatte[®]
for Adobe[®] *After Effects*[®]

ultimatte[®]
for Adobe® After Effects®

Ultimatte

Table of Contents

Ultimatte for Adobe After Effects	1
<i>minimum system requirements</i>	1
<i>installation and security key</i>	1
<i>screen correction</i>	2
<i>grain killer</i>	2
<i>ultimatte</i>	2
<i>black matting</i>	2
terminology	3
the Ultimatte tutorial	4
<i>creating a new project</i>	4
<i>ultimatte tools</i>	4
Screen Correction	
<i>corrects uneven lighting, smudges & set pieces</i>	7
<i>the process</i>	8
<i>the screen correction matte controls</i>	10
<i>screen correction summary</i>	11
Grain Killer	
<i>to clean-up grainy & noisy backing</i>	13
<i>the process</i>	14
<i>the RGB offset controls</i>	14
<i>matte density control</i>	15
<i>black gloss controls</i>	15
<i>grain killer summary</i>	16
Ultimatte compositing	17
<i>the process</i>	18
<i>set matte controls</i>	19
black matte controls	
<i>for print thru, dark edges & glowing edges</i>	20
<i>matte density</i>	20
<i>red density</i>	20
<i>green density</i>	20
<i>blue density</i>	20
<i>black gloss</i>	20
<i>black gloss 2</i>	20

matte controls	
for hard edges, glowing edges & screen imperfections	21
<i>clean up</i>	21
<i>clean up balance</i>	21
<i>bg level balance</i>	21
<i>shadow noise</i>	21
<i>matte sizing</i>	21
flare controls	
for excessive spill & miscolored subject matter	22
<i>white balance</i>	22
<i>gray balance</i>	22
<i>black balance</i>	22
<i>gate 1/3</i>	22
<i>gate 2</i>	22
veil controls	
for miscolored background & miscolored edges	23
<i>master</i>	23
<i>red veil</i>	23
<i>green veil</i>	23
<i>blue veil</i>	23
Ultimatte summary	24
Black Matting composites	
for shots with black backing areas	25
<i>the process</i>	26
<i>offset control</i>	28
<i>RGB density</i>	28
<i>clean up</i>	28
<i>clean up balance</i>	28
After Effects controls	29

about this user guide

This manual is designed for use in conjunction with the included *Ultimatte Overview Manual* that provides more complete information about how **Ultimatte** works and how to achieve the best results. Also, this manual assumes that you are familiar with **Adobe After Effects** and understand its basic operation.

Throughout this document, references to blue screening, blue backing areas, etc. would apply to green when green is used as a backing color.

We suggest that you read through this manual (it's short!) and follow along tutorial-style to get up to speed on **Ultimatte** as quickly as possible.

how to contact us

In addition to reading the *Ultimatte Overview Manual*, you can learn more about blue-screen compositing techniques and the latest news on our After Effects plug-ins by visiting the **Ultimatte** web site at **www.ultimatte.com**

Technical support is available from 8:00 AM to 4:30 PM Pacific time at (818) 993-8007 or you can send e-mail to **support@ultimatte.com**.

Ultimatte Corporation
20554 Plummer Street
Chatsworth, CA 91311
tel: (818) 993-8007
fax: (818) 993-3762

www.ultimatte.com



Ultimatte for Adobe After Effects

Ultimatte bluescreen image compositing and matting software for **Adobe After Effects** produces seamless composited images using the same patented algorithms as in **Ultimatte's** Oscar and Emmy-award winning systems. With **Ultimatte**, you can create flawless composites of the highest quality, retaining all details, shadows and transparencies.

Ultimatte is NOT a simplistic chroma-keyer, but the same full-fledged, professional quality blue and green screen system used in major motion pictures, on television and in multimedia productions of the highest caliber. Fine hair detail, water, shadows, smoke, glass and reflections, even blurred edges are all composited flawlessly and automatically. With **Ultimatte**, you achieve totally realistic-looking composited scenes that would otherwise be too dangerous, impossible or impractical. Use **Ultimatte** to place your talent in any situation without the expense of transporting them and their entourage to a location shoot.

Ultimatte provides four plug-ins for **After Effects: Screen Correction, Grain Killer, Ultimatte** and **Black Matting**

minimum system requirements

Ultimatte will run on any system configured to run **Adobe After Effects**.

installation and security key

The key must be connected in order for the software to run. If the key is not connected, the **Ultimatte** software will run in demo mode and render a grid over its output.

Macintosh:

Make sure your computer is shut down, then install the **Ultimatte** security key on the Apple Desktop Bus. Re-boot your computer and then insert the **Ultimatte** CD in your CD-ROM drive and run the **Ultimatte** Installation program. Also, drag the Images and Projects folders into a directory of your choosing on the hard drive of your computer.

Windows:

Make sure your computer is shut down, then install the **Ultimatte** security key on your computer's parallel port. Re-boot your computer and then insert the **Ultimatte** CD in your CD-ROM drive and run the **Ultimatte** Installation program. Choose both the "Install Plug-ins" and the "Install Projects" options.

getting started

getting started

Ultimate for Adobe After Effects

Ultimate for Adobe After Effects consists of four plug-ins which can be used to create flawless composites:

Screen Correction

compensates for anomalies in the blue screen; uneven lighting, smudges, seams, or blue set pieces. Using an exact copy of the problematic blue screen with the subject matter removed, this effect will rid the foreground of these unwanted anomalies, creating a new image against a perfect blue backing.

Grain Killer

reduces noise in the screen area of the foreground often created by film grain, video noise, or compression.

Ultimate

creates the matte and seamlessly composites foreground elements into a background scene retaining all detail. If the camera can see it, **Ultimate** can composite it.

Black Matting

is the newest Ultimate plug-in that lets you create composites from foregrounds shot against black, such as fireworks or explosions. Because it is designed to work with black backing areas, it does not work with Screen Correction or Grain Killer and is used by itself.

To obtain the best results, use the plug-ins in the following order: Screen Correction, Grain Killer and then Ultimate. Black Matting is used by itself.

terminology

Background

The image that will replace the backing color of the foreground in the final composite. Also noted as BG.

Backing

The blue or green screen area.

Black Matting

This plug-in lets you use black as a backing color (perfect for explosions!)

Composite

The foreground image (with the backing area and flare removed) combined with the background clip.

Flare

Contamination of the blue (green) screen on to the foreground subject. Also referred to as spill.

Foreground

The subject matter against the backing color. Also noted as FG.

Grain Killer

This plug-in reduces noise in the screen area of the foreground often created by film grain, video noise, or compression.

Matte

A black, gray and white image that is used to determine the percentage of foreground and background values. Also referred to as alpha channel.

Print-thru

When areas of the background are

visible through the foreground subject where they should not be seen, or when the foreground is not opaque in areas that should be opaque.

Processed Foreground

The foreground image with the backing area suppressed to black and all flare removed.

Screen Correction

This plug-in compensates for anomalies in the blue screen; uneven lighting, smudges, seams, or blue set pieces. Using an exact copy of the problematic blue screen element with the subject matter removed, this effect will rid the foreground of these unwanted anomalies, giving the impression of being shot against a perfect blue field.

Screen Correction Scene

An identical copy of the original foreground with no props or talent.

Veiling

A colorized haze over the background.

Ultimatte

The compositing plug-in which seamlessly composites foreground elements into a background scene retaining all detail. If the camera can see it, Ultimatte can composite it.

For more complete discussions of these, please see the Ultimatte Overview Manual.

getting started

Ultimate Tutorial



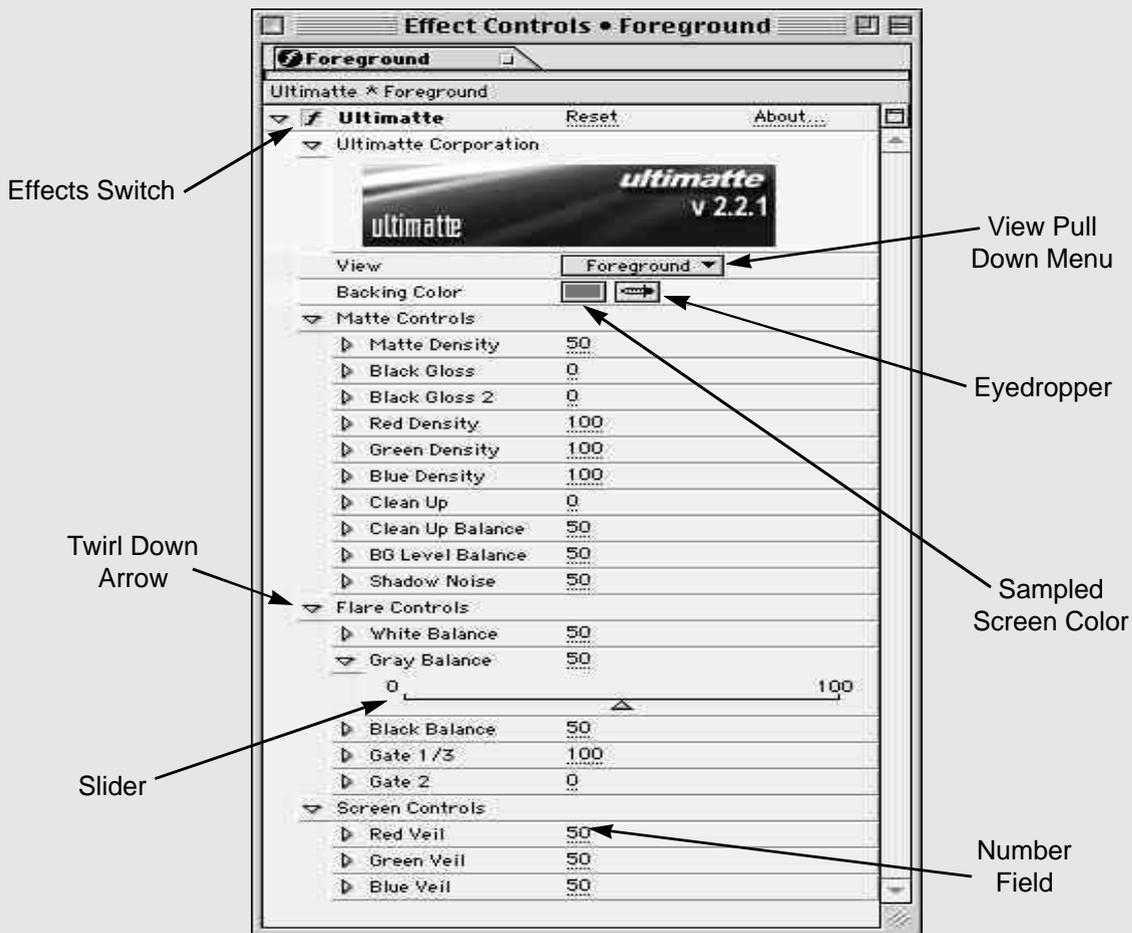
A completed *Ultimatte* project in
Adobe After Effects

Creating the Project

After you have installed the *Ultimatte* plug-ins, begin by opening After Effects and creating a new project using the File>New Project menu item. Load the Foreground, Screen Correction, and Background footage into the project. To achieve the highest quality on your projects, be sure to import clips with little or no compression.

Above is an example of a typical *Ultimatte* Composite in After Effects. This is an example of a typical *Ultimatte* Effects panel within After Effects. All *Ultimatte* effects are located in Effects>*Ultimatte*. Drag and drop the Background, Screen Correction and the Foreground onto the Comp 1 icon within the project window. This will assure that your clips are perfectly aligned. Remember to keep the Foreground clip above the Background clip in the time layout window.

The following tools are commonly used during the Ultimatte process:



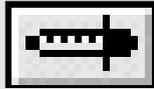
getting started

getting started

tools and icons



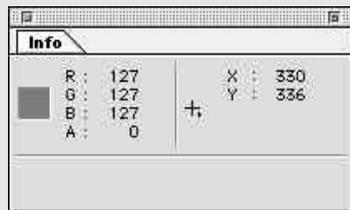
Effects Switch: This box will allow the effect to easily be turned on or off.



Eyedropper: The eyedropper tool is used by placing the tip over the desired area and clicking the mouse to collect data.



Eyeball: This icon allows a layer to remain in the time layout without being visible. "Closing" the eyeball for the screen correction layer will allow the clip to be used as a reference layer.



Info Palette: This palette contains RGB values and will be helpful when using Grain Killer. The Info palette is located in Windows>Palettes>Info.



Number Field: Click once on any underlined number field to enter a numeric setting. In the dialog box, type in the desired value, click OK.



Slider: This option allows you to click and drag on the triangular handle to change settings. Holding the Option (Mac) / Alt (Windows) key while moving this control will update the Comp window for every value. Remember that After Effects does not allow for real time rendering, therefore allow time for settings to change. .



Twirl Down Arrow: Click once on this icon to expose or collapse controls.



Zoom: Located in the tools palette, the zoom tool will allow a closer view of the image. Hold the Option (Mac) or the Alt (Windows) key while clicking to "zoom out" of the frame.

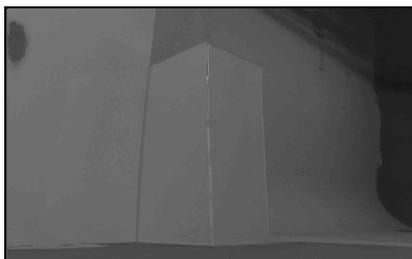
Screen Correction corrects uneven lighting, smudges & set pieces

**For best results use Screen Correction, then
Grain Killer followed by Ultimatte.**

Screen Correction compensates for anomalies in the backing area such as uneven lighting, smudges, seams, variations in the backing color, blue set pieces, and unwanted shadows cast by set pieces. By using an exact copy of the problematic blue screen element with the foreground subject matter omitted as a reference, *Ultimatte's* algorithms will automatically correct the foreground so that the levels of the blue (green) screen are the same throughout each frame. *Screen Correction* differentiates between foreground elements and backing flaws, thereby allowing the *Ultimatte* algorithms to retain all foreground detail without compromise because of a poorly shot foreground element. For more detailed information, see the *Screen Correction* section in the *Ultimatte Overview Manual*.



+



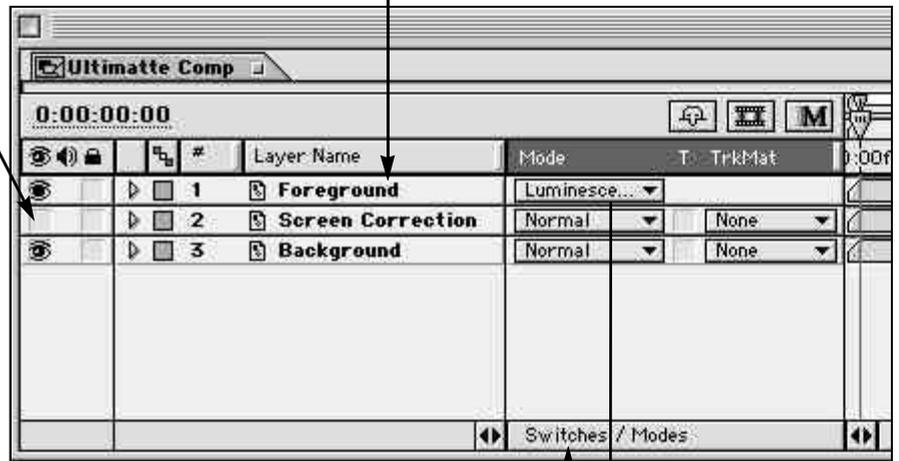
Screen Correction

the process

In the Time Layout window, be sure to align the Screen Correction layer perfectly with the in/out position of the Foreground Layer.

Switch the view (eyeball) to off on the Screen Correction layer.

Select the foreground clip in the Time Layout Window.



Change "Switches" to "Transfer Controls" in the Time Layout.

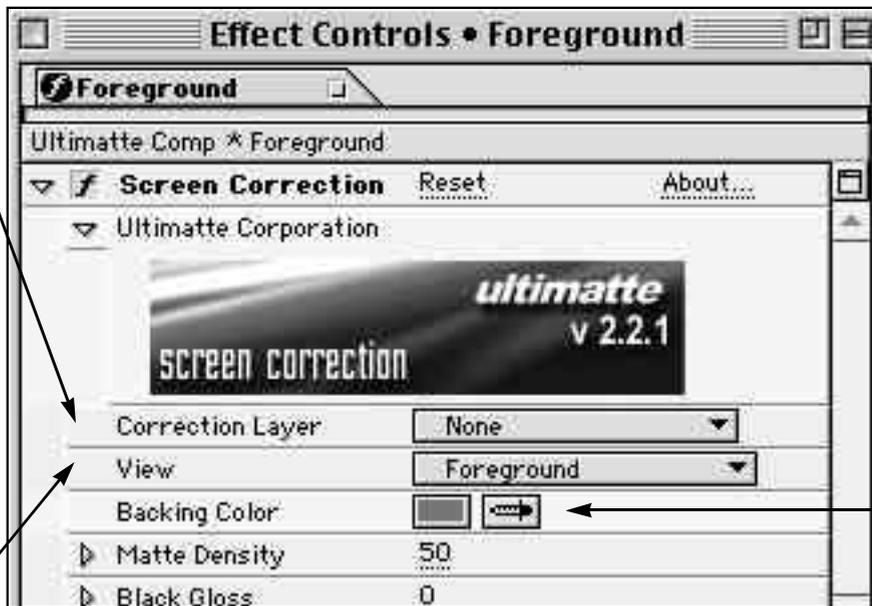
Change the Foreground transfer mode by dragging from "Normal" to "Luminescent Premul".

- Normal
- Dissolve
- Dancing Dissolve
- Add
- Multiply
- Screen
- Overlay
- Soft Light
- Hard Light
- Darken
- Lighten
- Difference
- Hue
- Saturation
- Color
- Luminosity
- Stencil Alpha
- Stencil Luma
- Silhouette Alpha
- Silhouette Luma
- Luminescent Premul
- Alpha Add

With the Foreground clip still selected, apply **Effects>Ultimate>Screen Correction** from the menu bar.

In the effects dialog box, use the eyedropper tool to sample the blue or green backing color of the FG (foreground) image that appears in the viewing area. Be careful to select an area of backing unobscured by any FG detail (smoke, hair, reflections in glass, or shadow areas).

Set the Correction Layer pull down menu to the Screen Correction layer.



Set the View pull down menu to Corrected Foreground.

Using the Screen Correction Matte Controls

The controls in this menu are used to isolate the foreground image from the backing. When using *Screen Correction* the matte should have perfect density or be slightly over-dense, but never under-dense. If an object that should have an opaque matte has a semi-transparent matte, *Screen Correction* will try to partially correct that object, thereby making it closer to the actual backing color. This will cause more print-thru problems when the *Ultimatte* plug-in is used.

You can use the *Matte Density* control to stop print-thru in bright foreground objects or the *Black Gloss* control to prevent print-thru in black glossy or dark foreground objects.

- Set the *View pull-down window* to "Matte" and decide if there are any areas that appear gray (transparent) in your foreground subject matte that should be white (opaque).
- Adjust the *Matte Density* and/or *Black Gloss* values slightly by using the slider.
- Set your view back to "Corrected Foreground" to view the results.

You've finished with *Screen Correction!* If you want to learn more about how it works, please read the appropriate section of the informative "Ultimatte Overview Manual."

Screen Correction Summary

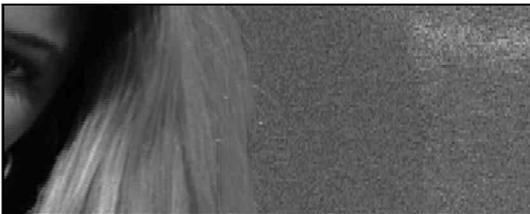
- **Switch the eyeball off for the Screen Correction layer**
- **In the Time Layout Window, Select the Foreground layer**
- **Change the Transfer Control to Luminescent Premul for the Foreground**
- **Select Effects>Ultimate>Screen Correction**
- **Sample the Backing Color of the foreground layer**
- **In the Effects Box, set the Correction layer pull-down menu to the Screen Correction layer**
- **Set the View pull-down menu to Corrected Foreground**

Grain Killer **to clean up grainy & noisy backing**

If you are using Screen Correction, use it before you use Grain Killer

Grain Killer is an exclusive *Ultimate* feature which removes film grain or video noise from only the blue screen area. *Ultimate* is so good at compositing fine detail that any noise in the backing will be composited onto the background, adding to noise which resides in the background scene. This is often very subtle and unnoticeable. However, if you want a perfectly clean composite, especially where the noise problem is compounded by multi-layer composites, *Grain Killer* will remove the noise from the background without softening the foreground subject. For a more complete discussion of *Grain Killer*, please see the *Ultimate Overview Manual*.

Remember that if you are using *Screen Correction*, use it before you use *Grain Killer*.



Before Grain Killer



After Grain Killer

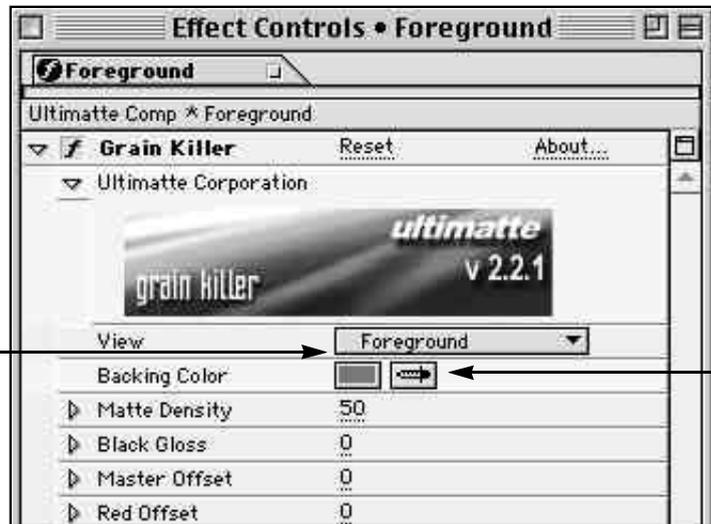
Grain Killer

the process

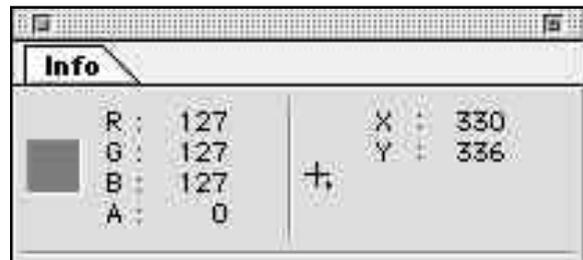
Sample The Backing Color

In the effects dialog box, use the eyedropper tool to sample the backing color of the FG (foreground) image that appears in the viewing area. Be careful to select an area of backing unobscured by any FG detail (smoke, hair, reflections in glass, or shadow areas).

In the Effects dialog box, switch the View pull down menu to Filter Area.



Be sure that the After Effects Info palette is visible.



Define the Filter Area

This process will define areas of the backing to be filtered. The white areas represent filter areas (screen), while the black and colored sections represent areas not to filter (subject and transitions areas). Ideally, the settings should be such that the film grain or video noise in the backing color become part of the filtered area (white).

While moving the cursor over these black pixels, take note of the RGB values in the Info palette. For example, when the cursor touches a black pixel of the screen area, the RGB values might be "7,15,3." Another black pixel might have RGB values of "18, 9, 2" and

a third pixel may have RGB values of “14, 8, 0.” Enter the highest value in the respective offset control on the Grain Killer effects panel. In this example, set the Red Offset to “18,” the Green Offset to “15,” and the Blue Offset to “3.”



Before Grain Killer



After Grain Killer

Repeat this process until the screen area is white, ADDING the largest value to the appropriate offset control. Therefore if the next set of RGB values is “5, 2, 1,” the new Red Offset value should be “23.” (Previous setting $18 + 5 = 23$) Follow this procedure in the G and B channels.

Master Offset will increase the Red, Green and Blue offset simultaneously and is additive to the individual offset controls. For example, if the RGB values “24, 32, and 11” were observed, adjust the Master Offset to the lowest of the RGB values: “11.” This will quickly change the range of the offsets.

Switch between the filtered foreground and the foreground to determine if filtering is occurring in the subject matter.

- Set the View pull down menu to Filtered Foreground.

Adjust Matte Density and Black Gloss Controls if necessary

The Matte Density and Black Gloss controls are used to isolate the foreground image from the backing. The control names are the same as in Ultimatte, but they are used differently. When using Grain Killer the matte channel controls the amount of filtering that will occur in transparent areas and edges. If the matte is under dense, then too much filtering will occur in the semi-transparent areas, thereby giving the impression of a softer image or a loss of detail. Therefore, attempt to create either a perfectly dense or over dense matte.

Set these controls using the following guidelines.

- Matte Density: Use this control to stop filtering in bright foreground objects.
- Black Gloss: Use this control to stop filtering in black glossy or dark foreground objects.

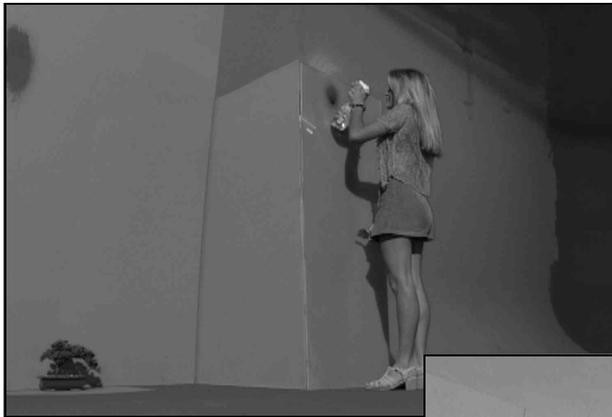
Grain Killer Summary

- ***In the Time Layout Window, Select the Foreground Layer***
- ***Change the Transfer Control to Luminescent Premul for the Foreground Layer***
- ***Select Effects>Ultimate>Grain Killer***
- ***Sample the Backing Color***
- ***In the Effects dialog box, Set the Offset Controls***
- ***Adjust Matte Density and Black Gloss Controls if necessary***
- ***Set the View pull-down menu to Filtered Foreground***

Ultimate compositing

If you're using *Screen Correction* or *Grain Killer*, use them before you composite with *Ultimate*. If your backing area is black, skip this section and go to the **Black Matting Section on Page 25.**

Now that you've prepared your shots using *Screen Correction* and *Grain Killer*, you're ready to composite the elements together using *Ultimate*. It will take the output from the *Screen Correction* and *Grain Killer* presets and combine the foreground and background images using a matte to create a new composited image. *Ultimate* has the unique ability to composite anything that the camera can see, including but not limited to smoke, shadows, glass, reflections, fine detail and motion blur.

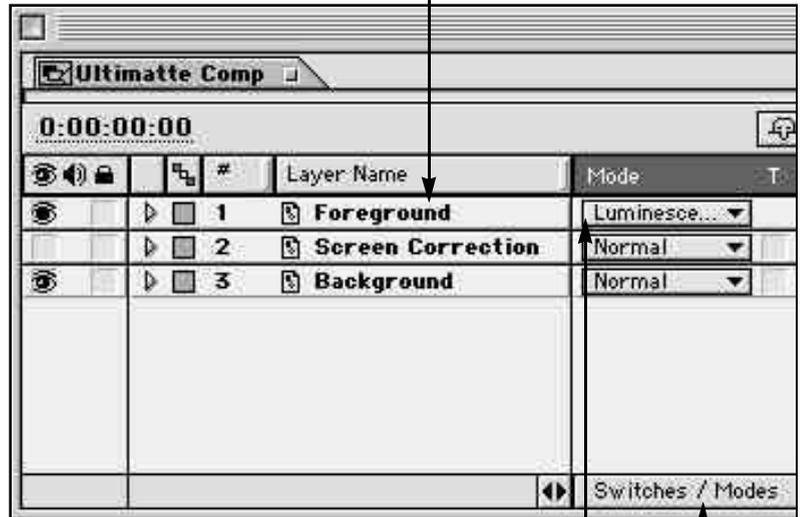


ultimate

Ultimatte

the process

Select the foreground clip in the Comp Time Layout Window



- Normal
- Dissolve
- Dancing Dissolve
- Add
- Multiply
- Screen
- Overlay
- Soft Light
- Hard Light
- Darken
- Lighten
- Difference
- Hue
- Saturation
- Color
- Luminosity
- Stencil Alpha
- Stencil Luma
- Silhouette Alpha
- Silhouette Luma
- Luminescent Premul
- Alpha Add

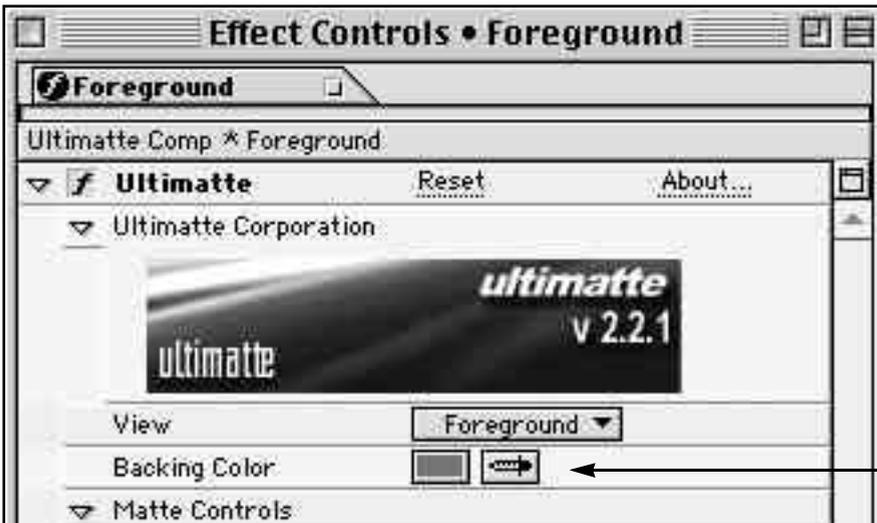
Change the Foreground transfer mode by dragging from "Normal" to "Luminescent Premul".

If you haven't already done so, Change "Switches" to "Transfer Controls" in the Time Layout.

With the Foreground clip still selected, apply **Effects>Ultimatte>Ultimatte** from the menu bar.

Sample the Backing Color

In the effects dialog box, use the eyedropper tool to sample the backing color of the FG (foreground) image that appears in the viewing area. Be careful to select an area of backing unobscured by any FG detail (smoke, hair, reflections in glass or shadow areas).



Set the Matte Controls

Now click on the "Matte Controls" button in the *Ultimatte Effect Editor* window and use the view drop-down menu to select "Matte." The matte will appear in the window.

The white areas represent opaque foreground subject matter, the black areas represent the backing areas which will be replaced by the new background image, and the gray areas represent partially transparent or transition areas. Reducing the density of the foreground object's matte can reduce dark matte lines in the composite.

Set the Flare Controls

Finally, click on the "Flare" tab to bring up *Ultimatte's* flare controls and set the "View" to "Composite." Often objects in the foreground shot will pick up some blue spill or flare. *Ultimatte's* algorithms automatically suppress the flare, but if the flare on the subject is excessive, you can use these controls to compensate. You can correct excessive flare by adjusting the *Gray Balance* and *Black Balance* controls found on the Flare menu. When blue spill is a problem, try slightly higher settings for each of these and *Ultimatte* will remove the blue that has "spilled."

This completes the tutorial section. The following pages describe each of the *Ultimatte* plug-in controls. You can also find additional information about these and all of the other controls for the *Ultimatte* plug-ins in the informative *Ultimatte Overview Manual*.

Ultimate controls

The first 6 Matte Controls are used for print-thru, dark edges and glowing edges.

Matte Controls	
▶ Matte Density	50
▶ Black Gloss	0
▶ Black Gloss 2	0
▶ Red Density	100
▶ Green Density	100
▶ Blue Density	100

Matte Density: Use this control to stop print-thru in bright foreground objects.

Warning: Advancing this control too far can cause hard, dark edges around foreground subjects.

Black Gloss: Use this control to stop print-thru in black glossy or dark foreground

objects. **Warning:** Advancing this control too far can cause dark edges around the foreground subject and shadows will darken and become opaque.

Black Gloss 2: Use this control to stop print-thru on dark foreground objects that have an excessive amount of spill from the backing. This control adjusts the foreground prior to generating the matte, thereby giving the appearance of being both a matte control and a flare control. **Warning:** Advancing this control too far can alter the color of the foreground objects.

Red Density: (not available for red backing): Use this control to reduce dark edges from reddish objects (flesh-tones). **Warning:** Reducing this control too much can cause print-thru in reddish foreground objects.

Green Density: (not available for green backing): Use this control to reduce dark edges from greenish objects (plants). **Warning:** Reducing this control too much can cause print-thru in greenish foreground objects.

Blue Density: (not available for blue backing): Use this control to reduce dark edges from bluish objects. (blue jeans) **Warning:** Reducing this control too much can cause print-thru in bluish foreground objects.

The next 5 Matte Controls are for hard edges, glowing edges and screen imperfections.

These matte controls are used to adjust the white and gray areas of the matte channel. This will dramatically affect the nature of foreground objects' edges, the opacity of transparent objects, and the noise in the background image. Use these controls sparingly as they WILL result in the loss of foreground detail. The proper technique for dealing with imperfections in the screen is through the use of *Screen Correction* and *Grain Killer*.

▶ Clean Up	0
▶ Clean Up Balance	50
▶ BG Level Balance	50
▶ Shadow Noise	50

Clean Up: Used to reduce imperfections or small amounts of noise in the backing. **Warning: Advancing this control too far will result in a "cut and paste" look. Background noise will be reduced, but foreground detail will also be reduced.**

Clean Up Balance: Used only when the *Clean Up* control has been adjusted, this control determines how much influence the *Clean Up* control will have on the foreground and background images. If using the *Clean Up* control causes glowing or dark edges, *Clean Up Balance* can be used to reduce this problem.

BG Level Balance: Use this control to override the automatic setting of the Background level as turned on by the matte, which is based on where the backing color was selected. Decreasing this control can enhance the appearance of fine foreground detail, but will darken the background image and increase "visual noise." Increasing this control can remove "visual noise" and brighten dark edges. **Warning: Advancing this control too far can cause foreground objects' edges to glow.**

Shadow Noise: Use this control to reduce noise in shadows and glare areas. **Warning: Decreasing the control too much will reduce fine detail.**

Matte Sizing: Use this control to adjust the size of the matte channel, often referred to as "choking the matte." It can be used to reduce matte lines. **Warning: Advancing this control too far will result in a loss of detail.**

Ultimate controls

Flare Controls for excessive spill & miscolored subject matter

▼ Flare Controls	
▶ White Balance	50
▶ Gray Balance	50
▶ Black Balance	50
▶ Gate 1/3	100
▶ Gate 2	0

The *Ultimate* algorithms will automatically suppress flare caused from the backing onto foreground subject matter. The flare controls are used to suppress excessive spill.

White Balance: Use this control to remove excessive spill on bright foreground objects.

Gray Balance: Use this control to remove excessive spill on midrange foreground objects.

Black Balance: Use this control to remove excessive spill on dark foreground objects.

Gate 1/3: ("Gate one three") Use this control to reproduce blues, greens, or cyans.

For blue screen: At 100%, blues will be reproduced. At 50%, blues will become cyan. At 0%, greens will be reproduced and blues/cyans will turn green.

For green screen: At 100%, greens will be reproduced. At 50%, greens will become cyan. At 0%, blues will be reproduced and greens/cyans will turn blue.

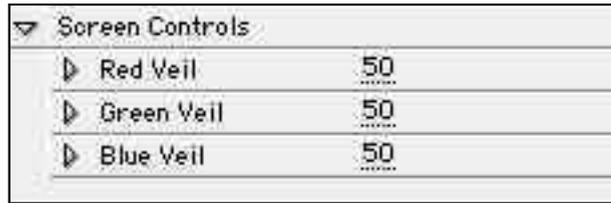
Gate 2: Use this control to reproduce the following colors:

For blue screen: used to reproduce pinks, purples, and magentas that will turn red when blue is subtracted. **Warning: Since skin tones are pinkish, advancing this control too far may add blue to the skin tones.**

For green screen: used to reproduce yellows and oranges that will turn red when green is subtracted. **Warning: Since skin tones are pinkish, advancing this control too far may add green to the skin tones.**

Veil Controls to correct a miscolored background or foreground edges

These controls are used to override the automatic suppression of the backing color. The *Ultimatte* process uses the selected backing color to suppress the backing to black. An indication that the automatic settings did not suppress enough backing is "veiling" or a colorized haze over the background. An indication that the automatic settings suppressed too much backing is darkened or miscolored foreground edges and transparencies. In most cases these controls will be left at their default settings.



Screen Controls	
▶ Red Veil	50
▶ Green Veil	50
▶ Blue Veil	50

Master: This control overrides the automatic suppression of the red, green and blue channels simultaneously. Increasing this control will increase the brightness in the screen area. Decreasing this control will cause a darkening of the edges and transparencies.

Red Veil: This control overrides the automatic suppression of the red channel. Increasing this control will increase the amount of red veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to become cyan.

Green Veil: This control overrides the automatic suppression of the green channel. Increasing this control will increase the amount of green veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to become magenta.

Blue Veil: This control overrides the automatic suppression of the blue channel. Increasing this control will increase the amount of blue veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to become yellow.

Ultimate Summary

- ***In the Time Layout Window, Select the Foreground Layer***
- ***Change Transfer Control to Luminescent Premul for the Foreground layer***
 - ***Choose Effects>Ultimate>Ultimate***
 - ***Sample the Backing Color***
- ***In the Effects dialog box, set the Matte, Flare, and Screen Controls, if necessary***
 - ***Set the View pull-down menu to Composite***

Black Matting

Use the Black Matting plug-in instead of the Ultimatte plug-in if your footage is shot against black.

The *black matting* plug-in is used when you have footage which is shot against a black or nearly black backing area. It is particularly useful when shooting self-illuminated subjects such as fireworks, explosions, flames, lightning effects and other specialized subject matter.



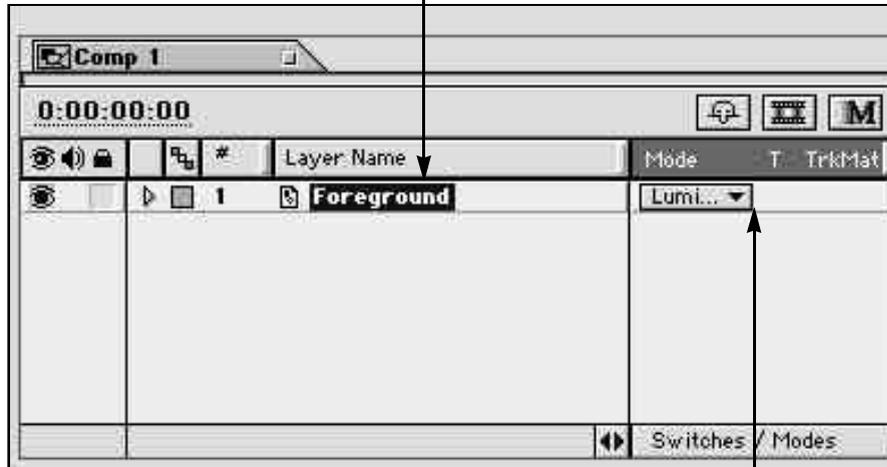
The Black Matting plug-in is used by itself and will not work with Screen Correction or Grain Killer.

black matting

Black Matting Compositing

the process

Select the foreground clip in the Comp Time Layout Window



- Normal
- Dissolve
- Dancing Dissolve
- Add
- Multiply
- Screen
- Overlay
- Soft Light
- Hard Light
- Darken
- Lighten
- Difference
- Hue
- Saturation
- Color
- Luminosity
- Stencil Alpha
- Stencil Luma
- Silhouette Alpha
- Silhouette Luma
- Luminescent Premul
- Alpha Add

Change the Foreground transfer mode by dragging from "Normal" to "Luminescent Premul".

If you haven't already done so, Change "Switches" to "Transfer Controls" in the Time Layout.

With the Foreground clip still selected, apply **Effects>Ultimatte>Black Matting** from the menu bar.

Sample the Backing Color

In the effects dialog box, use the eyedropper tool to sample the black backing color of the FG (foreground) image that appears in the viewing area. Be sure to select an area of backing unobscured by any FG detail (smoke, thin, almost transparent sections of flames, etc.).

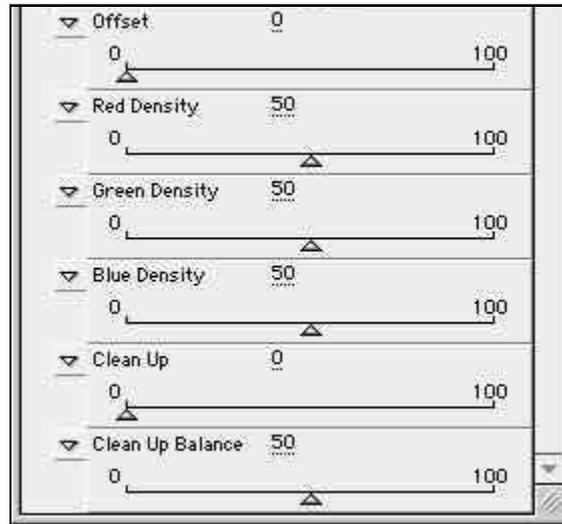


There are just five controls that influence the look of your composite when using the black matting plug-in. In most cases, you should be able to just pick the black backing color using the eyedropper and you'll be able to create an excellent composite.

If necessary, you can use the provided **Offset**, **Density** and **Cleanup** controls to adjust the density of colors in the foreground subject and clean-up the matte. You will find a more complete description of the controls used when black matting on the following page.

As with other Ultimatte controls, a little experimentation will help you to learn how the controls work and the effect that their use will have on your final composite.

Black Matting controls



Offset: The value for the offset is set when you sample the black backing area using the eyedropper tool. You can use this control's slider to override the value established by the selection of the backing color.

Red Density: Adjusts the density of the Red component in the Foreground subject. This allow you to fine-tune the look of semi-transparent areas of the Foreground Subject.

Green Density: Adjusts the density of the Green component in the Foreground subject. This allow you to fine-tune the look of semi-transparent areas of the Foreground Subject.

Blue Density: Adjusts the density of the Blue component in the Foreground subject. This allow you to fine-tune the look of semi-transparent areas of the Foreground Subject.

Clean Up: Used to reduce imperfections or small amounts of noise in the backing. **Warning: Advancing the Clean Up control too far will result in a "cut and paste" look. Background noise will be reduced, but foreground detail will also be reduced.**

Clean Up Balance: Used only when the *Clean Up* control has been adjusted, this control determines how much influence the *Clean Up* control will have on the foreground and background images. If using the *Clean Up* control causes glowing or dark edges, *Clean Up Balance* can be used to reduce this problem.

After Effects Controls

All of the usual After Effects features are available when using Ultimatte (eg., keyframes).

Color Correction

Color Correction should always occur after the matte has been generated by Ultimatte. After Effects has quite an extensive set of color controls, located under Effect >Image Control.

Garbage Matte

Several methods can be applied to create garbage mattes. The most direct method is to use Mask Handles or Mask Vertices.

- Double click on the foreground clip in the Time Layout window to expose the Foreground layer. Switch the pull down menu (currently displaying “none”) to “Mask Handles.”
- Grab one of the 8 handles on the outside edge of the image. Drag handle into the frame. View Composition window to see the change.
- Using “Mask Vertices” will produce a similar effect. Use the pen tool from the Tool box to create points and curves to outline the unwanted portion of the frame.
- Advancing the clip and changing the mask position will allow a track matte to be created.

Luminescent Premul

Luminescent Premul (luminescent premultiply) is the transfer mode that Ultimatte uses to combine images using a true additive mix. Try using other transfer modes to create various special effects.

For more information regarding any of these tips, consult the Adobe After Effects Documentation.

All product names are registered trademarks of their respective companies.
Ultimatte is a Registered Trademark of Ultimatte Corporation.
© Copyright 1999, Ultimatte Corporation All Rights Reserved. Confidential and Proprietary.

Ultimatte Corporation
20554 Plummer Street
Chatsworth, CA 91311 U.S.A.

Phone: (818) 993-8007
Fax: (818) 993-3762
www.ultimatte.com

U.S. Patent Numbers:
4,344,085; 4,625,231; 5,032,901; 5,202,762; 5,343,252; 5,424,781; 5,515,109; 5,557,339;
with corresponding foreign patents and patents pending.



20554 Plummer Street Chatsworth, California 91311 (818) 993-8007 Fax (818) 993-3762
www.ultimatte.com