

ULTIMATE[®]

Ultimate Plug-In User's Guide

for Adobe[®]Premiere[™]

& Media 100[™]



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Ultimatte Corporation

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Welcome to the Ultimatte Labs!
Watch for important tips from
me (or my Lab Rat) throughout
this manual!
First Tip: Have Fun!



THE ULTIMATTE PLUG-IN

Ultimatte is blue screen or green screen image compositing and matting software with the unique ability to maintain all detail in the foreground scene. The matte necessary to produce seamless composited images is generated automatically using the same patented Ultimatte algorithms as used in the television and motion picture industries.

MINIMUM SPECIFICATIONS & REQUIREMENTS

- ❖ Adobe Premiere 4.0.
- ❖ 24-bit Color Monitor.
- ❖ Windows 95, Windows NT 3.5.
- or
- ❖ Macintosh OS 7.0.

INSTALLATION

Windows:

The plug-in modules are installed by copying the modules into Adobe Premiere's plug-ins folder.

Macintosh:

For Premiere: plug-in modules are installed by dragging the icons for the modules into the plug-ins folder.

For Media 100: plug-in modules are installed by dragging the Premiere transition icons into the Media 100 transitions folder.

SECURITY KEY

For Windows:

Ultimatte is protected by a Sentinel security key from Rainbow Technologies. The key must be connected to a parallel port (preferably the LPT1) while the module is running.

To install the security key drivers, please follow the Read Me file on the software disk.

For Macintosh

Ultimatte is protected by an EVE security key from Rainbow Technologies. The key must be connected to an ADB (Apple Desktop Bus) port while the module is running. The ADB port is the port to which the keyboard and the mouse are attached. The security key can be attached directly to the port on the computer, to the cable between the computer and the keyboard, or between the keyboard and the mouse.

Getting Started

THE FEATURES & THE INTERFACE

The Ultimatte plug-in package is designed to work together to create flawless composites. This package includes three effects:

SCREEN CORRECTION

Screen Correction compensates for anomalies in the blue (green) 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.

GRAIN KILLER

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

ULTIMATTE

Ultimatte seamlessly composites foreground blue screen elements into a background scene retaining all detail. If the camera can see it, Ultimatte can composite it.

To obtain the best results, use the plug-ins in the following order: Screen Correction, Grain Killer, Ultimatte.

Two of the Ultimatte plug-ins, Screen Correction and Ultimatte can be found in the Transitions menu. The third effect, Grain Killer, can be found in Filters. (Grain Killer not available in Media 100.)

The dialog boxes appear very similar in all three effects. The following explains similarities found within these plug-ins.

ULTIMATTE INTELLIGENCE

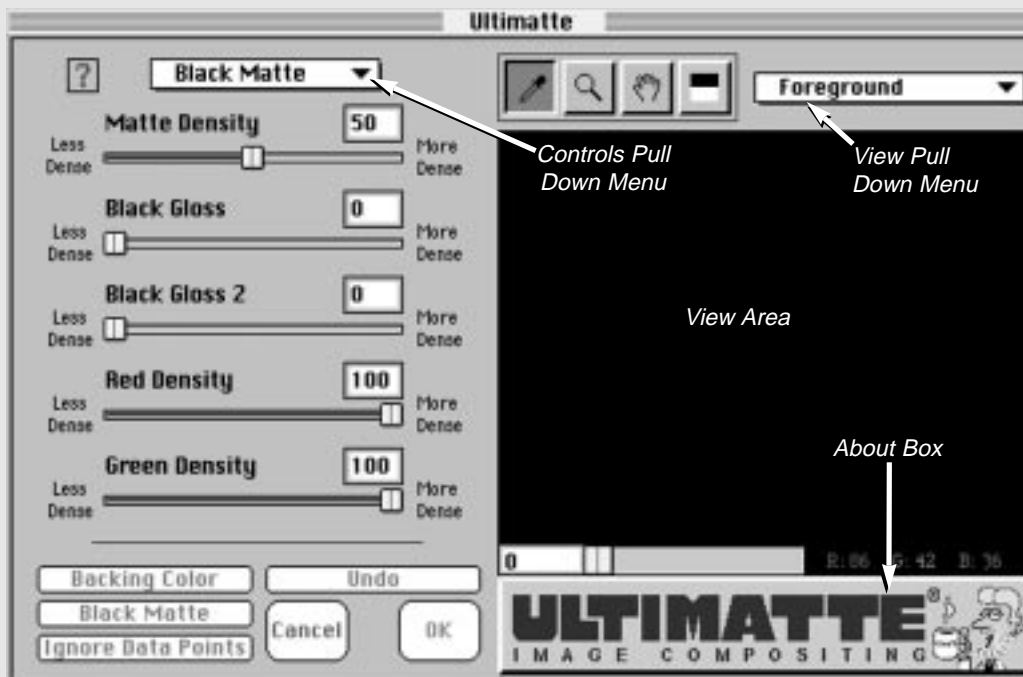
These plug-ins take advantage of Ultimatte Intelligence which incorporates all of the knowledge and experience of Ultimatte's engineers. This function is designed to determine the appropriate settings for the specific controls based on a collection of data points. The steps illustrated in this manual often use Ultimatte Intelligence, however, a brief description of the tools will be explained so the operator can set controls manually. Manual overrides may be made to all adjustments at any time using the slider bar controls. Please refer to the Ultimatte Overview Manual for a more comprehensive explanation of each control.

CREATING THE PROJECT & THE DIALOG BOX

LOAD IMAGES INTO PROJECT.

Load the Foreground, Screen Correction, and Background Footage into the Project. To achieve the highest quality, be sure to import clip with as little compression as possible, for example, quicktime movies with no compression or numbered pics.


THE DIALOG BOX





Getting Started


TOOLS


Help menu: Located in the top left portion of the dialog box, this button will launch a help screen.


Eyedropper: The eyedropper tool is  used by placing the tip over the desired area and clicking to collect data. This will be further explained in the appropriate sections.

Zoom: The zoom tool will allow a  closer view of the image. Hold the Alt or Opt key while clicking to "zoom out" of the frame.

Hand: While zoomed in, the hand tool  will allow the user to click and drag the image to a new position within the view area.

Wipe: The wipe tool allows the user to  look at the difference between the last two settings. Simply grab the tool, click in the viewing area and drag. Try this in an obvious situation first, for example, wipe between matte view and composite view.

View Area Scroll Bar: Located  below the view area, this control will allow footage to be advanced in small or large increments. Click and drag the button to view a different portion of the clip or type in the number of a specific frame.


Control Sliders: These slider controls  also allow the user to change settings. Click and drag the button to see the appropriate direction for the control or double click on the number and type a number for more specific movements. Clicking directly on the bar will advance the setting one increment at a time.


OK: Confirms all settings and returns user to the transition dialog box.



Cancel: Cancels any changes made to the settings and returns user to the transition dialog box.



Undo: Available in most menus, allows  one level of undo.

Ignore Data Points: Available with  Ultimatte Intelligence, this button will clear data collected with the eyedropper.

Quick Keys:

The tab key allows for advancement from one control to the next within a menu.

Use the arrow keys to change the values one increment at a time.

PREFERENCES

This menu found in the Controls pull down menu is used to load or save custom configurations and control files.

Reset Preferences to Factory Defaults: Use this control to reset the Preference Settings to the factory defaults. When a backing color is selected, all controls will be set to their factory default settings.

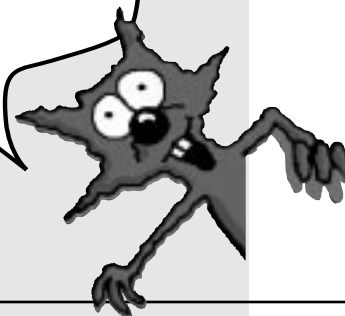
Save Current Settings to User Defaults: Use this control to save the Preference Settings to the current control settings. When a new backing color is selected, all of the control settings will be set to these saved control values.

Save Control File: Use this control to save the current control settings to a data file.

Load Control File: Use this control to load the control settings from a previously saved data file.

Resolution: Use this control to change the resolution of the preview image. By default, the preview image is set at 320X240. Changing the resolution here will not affect the resolution of the rendered scene.

Lab Rat Tip:
Adjusting resolution
to a higher setting is
great to view fine
detail!



Getting Started

WORDS TO KNOW

Background

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

Backing Color

The blue or green screen area.

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.

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 Scene

An identical copy of the original foreground with no props or talent. For more details please see the Ultimatte Overview Manual.

Veiling

A colorized haze over the background.

Professor Warhol Tip:
Not sure if you should be
using green or blue?
Check out the **Overview**
Manual for this and other
important information!



UNEVEN LIGHTING, SMUDGES & SET PIECES

FOR BEST RESULTS USE **SCREEN CORRECTION**, THEN **GRAIN KILLER** FOLLOWED BY **ULTIMATE**.

Screen Correction compensates for anomalies in the backing area such as uneven lighting, smudges, seams, variations in the backing color, blue (green) set pieces, and unwanted shadows cast by set pieces. By using an exact copy of the problematic blue (green) screen element with the foreground subject matter omitted as a reference, the patented Screen Correction 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 further explanation on Screen Correction, see the Screen Correction section in the Ultimatte Overview Manual.

LOAD FOREGROUND FOOTAGE INTO CONSTRUCTION WINDOW

Drag Foreground file into Track A.

LOAD SCREEN CORRECTION FOOTAGE INTO CONSTRUCTION WINDOW

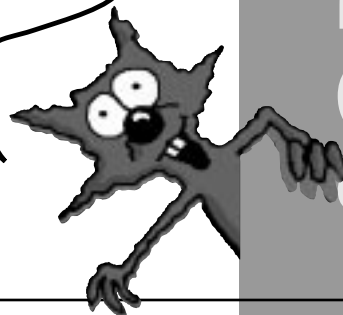
Drag the Screen Correction file into Track B. If the screen correction scene is one frame, click on the end of the frame and drag it to the full length of the foreground shot in Track A. This layer needs to align perfectly with the layer in Track A. **DO NOT** use the Align Transition Feature provided in Adobe Premiere.

FOR MEDIA 100:

The clip in track A must be one frame longer than the clip in Track B. Add an extra frame of foreground (or black) at beginning of the clip (in Track A only).

Lab Rat Tip:

If you didn't capture a frame of the blue screen without the talent, create one in a program such as Photoshop!



Screen Correction

DRAG SCREEN CORRECTION TRANSITION INTO TRACK A.

DOUBLE CLICK on the Screen Correction transition to display dialog box.

CLICK ON CUSTOM SETTINGS.

 The Screen Correction dialog box will be opened.

FOR MEDIA 100:

Highlight the clip in track A. Double click on the transition arrow.

In the Edit Suite, click once on the twirl down arrow. Click on Custom Settings to display the Screen Correction Dialog Box.

Twirl down arrow

Custom Settings




SAMPLE THE BACKING COLOR

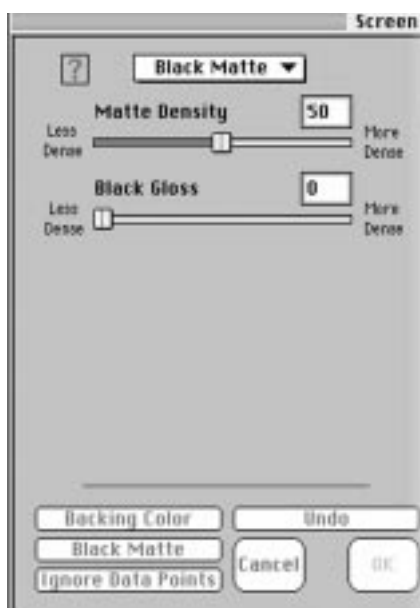


Use the eyedropper tool to sample the backing color of the FG (foreground) image that appears in the viewing area. Be careful to select an area of backing unobscured by any FG detail (smoke, hair, reflections in glass or shadow areas). While holding down the shift key, click several times in a SMALL area, near important FG detail. This allows for averaging of the blue screen data. DO NOT collect data from several different areas of the screen.

CLICK ON BACKING COLOR.

 The result will be the Screen Corrected foreground.

BLACK MATTE



SET BLACK MATTE CONTROLS

The controls in this menu are used to isolate the foreground image from the backing. The menu and control names are the same as in Ultimatte, but they are used differently. When using Screen Correction the matte should have perfect density or be slightly over densed, and never under densed. 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.

BLACK MATTE CONTROLS CAN BE SET BY USING ULTIMATTE INTELLIGENCE:



Switch View pull down menu to Matte. Switch controls pull down menu to Black Matte. While holding down the shift key, use the eyedropper tool to sample gray areas that are printing thru: where the foreground is opaque, the matte channel should be black. Avoid areas that are partially transparent (lace, blurred motion, smoke, etc.) since these should have a gray matte.

CLICK ON BLACK MATTE. The appropriate Matte Density and Black Gloss controls will automatically be set. Switch the View pull down menu to the Corrected Foreground.

Screen Correction

THESE CONTROLS SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES.

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

EXIT THE DIALOG BOX

Click OK to exit the Screen Correction dialog box.

Click OK to exit the Premiere Transition.

CREATE VIRTUAL CLIP

Use the virtual clip tool in order to apply additional effects to the Screen Corrected clip. Place the virtual clip in Track A.

FOR MEDIA 100:

Render the transition, export the clip and then import the new footage.

Professor Warhol Tip:
The next steps should be
Grain Killer and then
Ultimate!



Lab Rat Tip:
For the Media 100
remember to import and
export clips with the
same low compression!



GRAINY & NOISY BACKING AREA

BE SURE TO USE SCREEN CORRECTION BEFORE THIS STEP.

Grain Killer is a filtering process which reduces film grain or video noise in the blue (green) screen area only. One would expect to find grain or noise in both the background and foreground scene. When compositing these scenes together, the grain or noise that is in the blue (green) screen area, will be composited as well, thereby making the background even noisier than it was originally. This becomes especially problematic in multi-layered composites where the addition of noise as each layer is added could make the shot unusable. If a traditional process which does not distinguish subject matter from the blue (green) screen area before filtering were applied, then an overall softening of the image would occur. Grain Killer will soften shadows. For further explanation on Grain Killer, see the Grain Killer section in the Ultimatte Overview Manual.

LOAD THE GRAIN KILLER FILTER

Highlight the Screen Corrected Virtual Clip. Select Filters under the Clip menu. Add the Grain Killer filter.

FOR MEDIA 100:

Apply the Grain Killer filter in Adobe Premiere or After Effects before using Ultimatte in the Media 100.

SAMPLE THE BACKING COLOR



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). While holding down the shift key, click several times in a SMALL area, near important FG detail. This allows for averaging of the blue screen data. DO NOT collect data from several different areas of the screen.

CLICK ON BACKING COLOR.

Backing Color

GRAIN KILLER

Grain Killer

BLACK MATTE



SET BLACK MATTE CONTROLS

The controls in this menu are used to isolate the foreground image from the backing. The menu and 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 underdensed, 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 densed matte.

THESE CONTROLS CAN BE SET BY USING ULTIMATE INTELLIGENCE:



Switch View pull down menu to Matte. Switch controls pull down menu to Black Matte. While holding down the shift key, use the eyedropper tool to sample gray areas that are printing thru: where the foreground is opaque, the matte channel should be black. Avoid areas that are partially transparent (lace, blurred motion, smoke, etc.) since these should have a gray matte.

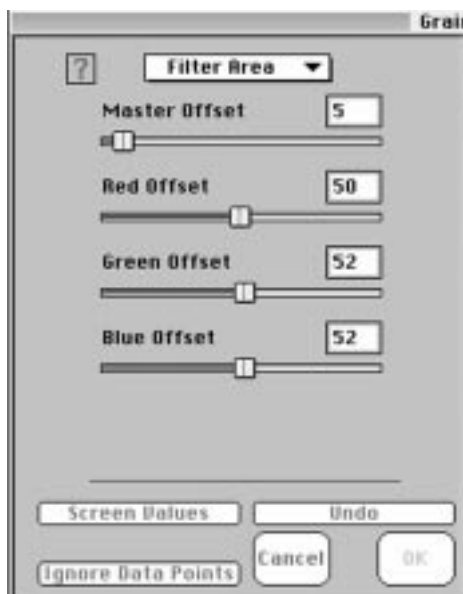
CLICK ON BLACK MATTE. The appropriate Matte Density and Black Gloss

Black Matte controls will automatically be set.

THESE CONTROLS SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES

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

FILTER AREA



DEFINE THE BACKING AREA TO BE FILTERED

Switch both pull-down menus to Filter Area. The controls on this menu are used to define which areas of the backing will be filtered and which areas will not be filtered. The white areas represent areas that will be filtered. The black areas represent objects that should not be filtered. The ideal settings should be such that the film grain or video noise become part of the filtered area.

THESE CONTROLS CAN BE SET BY USING ULTIMATTE INTELLIGENCE.



With the eyedropper, click on a black pixel that represents film grain or video noise in the screen area.

CLICK ON SCREEN VALUE.

Screen Values The RGB Offsets will automatically be adjusted.

Continue these two steps until the screen area is mostly white.

Grain Killer

THESE CONTROLS SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES.

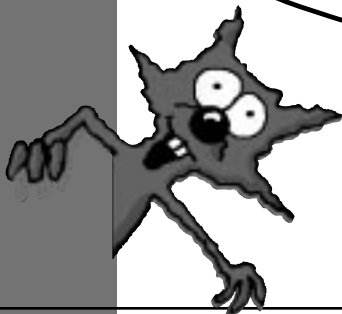
- ❖ **Master Offset:** Use this control to define the filter area in Red, Green, and Blue channels simultaneously.
- ❖ **Red Offset:** Use this control to define the filter area in the red channel only.
- ❖ **Green Offset:** Use this control to define the filter area in the green channel only.
- ❖ **Blue Offset:** Use this control to define the filter area in the blue channel only.

SET VIEW TO FILTERED FOREGROUND.

Click OK to exit the Grain Killer dialog box.

Click OK to exit the Premiere Filter Menu.

Lab Rat Tip:
If your image still appears
grainy, using additional
grain killer passes will help



Professor Warhol Tip:
When using Virtual Clips in
Adobe Premiere, be sure
not to move your original
source files. If you must
reposition your original files,
re-create the virtual clip.
See Premiere manual for
more details!



COMPOSITING

BE SURE TO USE SCREEN CORRECTION AND GRAIN KILLER BEFORE THIS STEP.

Ultimatte has the unique ability to composite anything the camera can see, including but not limited to, smoke, shadows, glass, reflections, fine detail, and motion blur.

SELECT ULTIMATTE TRANSITION

With the Screen Corrected, Grain Killed foreground in Track A and the background in Track B, drag the Ultimatte transition into Track T.

FOR MEDIA 100:

The Screen Corrected clip in Track A must be one frame longer than the clip in Track B. Add an extra frame of foreground (or black) at beginning of the clip (in Track A only).

SAMPLE THE BACKING COLOR



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). While holding down the shift key, click several times in a SMALL area, near important FG detail. This allows for averaging of the blue screen data. **DO NOT** collect data from several different areas of the screen.

CLICK ON BACKING COLOR.

Backing Color The result will be the Composite.

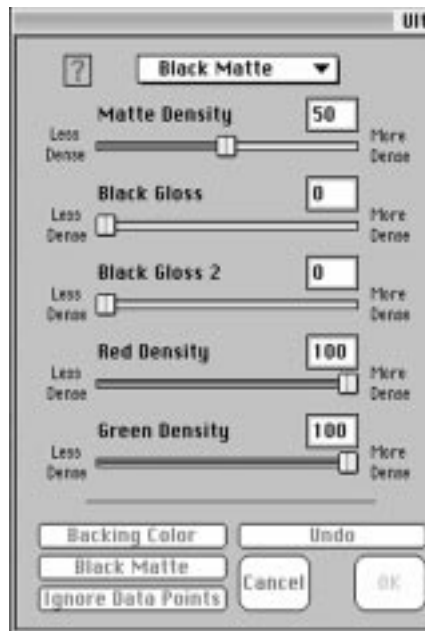
Lab Rat Tip:
If the camera can see it, Ultimatte will composite it!



ULTIMATE

Ultimatte

PRINT THRU, DARK & GLOWING EDGES



SET BLACK MATTE CONTROLS

The controls in this menu are used to adjust the density or opacity of the foreground objects. The density of a foreground object is determined by its matte (alpha) value. A completely opaque object's matte will be black, a completely transparent object's matte will be white, and a partially transparent object's matte will be gray. Reducing the density of the foreground object's matte can reduce dark matte lines from showing in the composite.

THE FIRST TWO CONTROLS CAN BE SET BY USING ULTIMATTE INTELLIGENCE:



Switch the View pull down menu to Matte. Switch the Control pull down menu to Black Matte. While holding down the shift key, use the eyedropper tool to sample gray areas that are printing thru: where the foreground is opaque, the matte channel should be black. Avoid areas that are partially transparent (lace, blurred motion, smoke, etc.) since these should have a gray matte.

CLICK ON BLACK MATTE. The appropriate Matte Density and Black Gloss

Black Matte controls will automatically be set. Switch the View pull down menu to the Composite view.

THESE CONTROLS SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES.

- ❖ **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 hard, dark edges around foreground subjects.

THE FOLLOWING ADDITIONAL ADJUSTMENTS NEED TO BE MADE MANUALLY BASED ON THE FOREGROUND SUBJECT MATTER AND THE SCREEN COLOR.

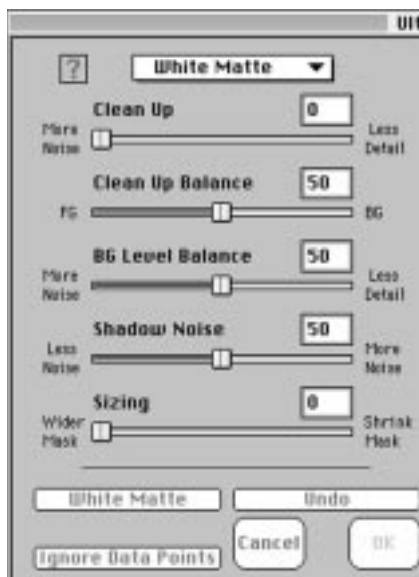
- ❖ **Black Gloss 2:** Use this control to stop print-thru on foreground objects that have an excessive amount of spill from the backing. This control adjusts the foreground prior to generating the matte, thereby giving the appearance of being both a matte control and a flare control. **Warning:** Advancing 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 (fleshtones). **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. **Warning:** Reducing this control too much can cause print-thru in bluish foreground objects.

Professor Warhol Tip:
Using the wipe tool will
easily allow you to see the
difference between these
subtle settings!



HARD EDGES, GLOWING EDGES & SCREEN IMPERFECTIONS



SET WHITE MATTE CONTROLS

The White 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 the use of Screen Correction and Grain Killer.

THE FIRST CONTROL CAN BE SET BY USING
ULTIMATTE INTELLIGENCE:



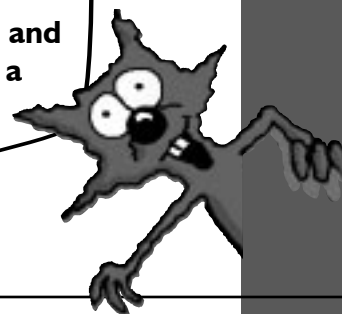
Switch the view pull down menu to Matte. Switch the Control pull down menu to White Matte. While holding down the shift key, use the eyedropper tool to sample gray areas that should be white. Avoid areas that are partially transparent (lace, blurred motion, smoke, etc.) since these should have a gray matte.

CLICK ON WHITE MATTE.

White Matte

Clean Up will automatically be set.

Lab Rat Tip:
Use these controls and
give your talent a
“Haircut!”



ULTIMATE

THIS CONTROL SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES.

- ❖ **Clean Up:** Use this control 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.

THE FOLLOWING ADDITIONAL ADJUSTMENTS NEED TO BE MADE MANUALLY BASED ON THE FOREGROUND SUBJECT MATTER.

- ❖ **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 caused 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, 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 the 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.
- ❖ **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 can result in loss of detail.

EXCESSIVE SPILL & MISCOLORED SUBJECT MATTER



SET FLARE CONTROLS

The Ultimatte 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%, greens will be reproduced. At 50%, blues will become cyan. At 0%, blues and cyans turn green.

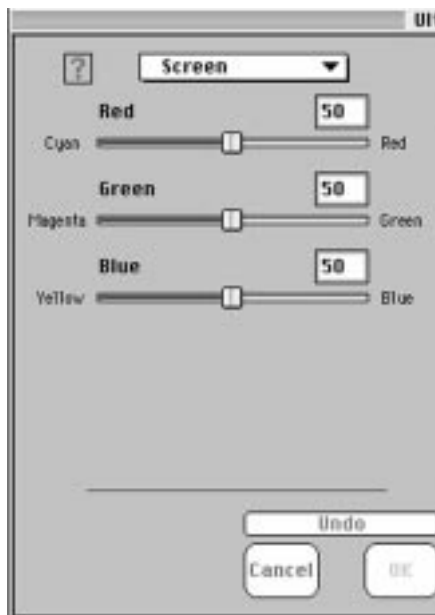
For Green Screen: At 100%, blues will be reproduced. At 50%, greens will become cyan. At 0%, greens and cyans turn blue.

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

For Blue Screen: used to reproduce pinks, purples, and magentas that will turn red. **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. **Warning:** Since skin tones are pinkish, advancing this control too far may add green to the skin tones.

MISCOLORED SCREEN AREA & MISCOLORED EDGES



SET SCREEN CONTROLS

The controls in this menu 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.

- ❖ **Red:** This control overrides the automatic suppression of the red channel. Increasing this control will increase the amount of veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to turn cyan.
- ❖ **Green:** This control overrides the automatic suppression of the green channel. Increasing this control will increase the amount of veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to turn magenta.
- ❖ **Blue:** This control overrides the automatic suppression of the blue channel. Increasing this control will increase the amount of veiling (residue) left in the backing area. Decreasing this control will cause foreground edges and transparencies to turn yellow.

COLOR CONFORMANCE

SET COLOR CONTROLS

A flawless composite requires matched blacks, whites, and gammas between foreground and background elements. Color Conformance with Ultimatte Intelligence allows you to choose blacks, whites, and gammas and will automatically match the foreground to the background or vice versa.

MATCHING FOREGROUND TO BACKGROUND WITH COLOR CONFORMANCE

Switch the View pull down menu to Composite. Switch the Controls pull down menu to the appropriate foreground color menu (FG Level, FG Black, FG Gamma).



While holding down the shift key, use the eyedropper tool to select whites, blacks, or gammas (based on the chosen menu) from both the background and foreground scenes.

CLICK ON FG TO BG. The RGB values of the foreground colorizers will

☐ **FG TO BG** automatically be set.

THESE CONTROLS SET BY ULTIMATTE INTELLIGENCE CAN BE OVERRIDDEN USING THE FOLLOWING GUIDELINES.



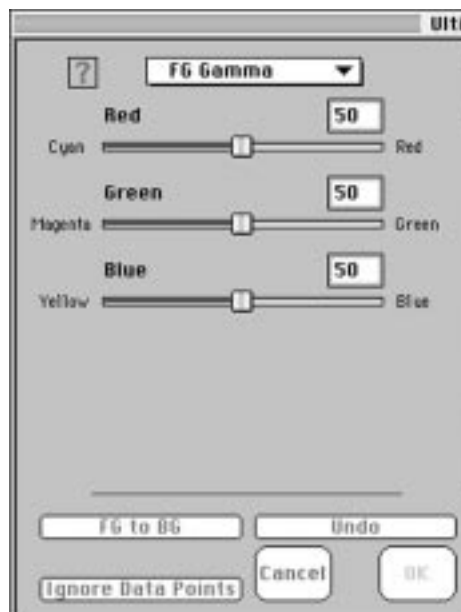
FG LEVEL

The controls on this menu are used to adjust the RGB levels of the foreground image.

Red: Use this control to adjust the level of the red channel in the foreground image.

Green: Use this control to adjust the level of the green channel in the foreground image.

Blue: Use this control to adjust the level of the blue channel in the foreground image.



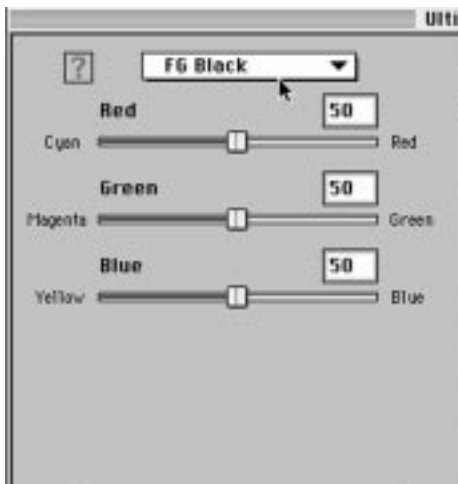
FG GAMMA

The controls on this menu are used to adjust the RGB gammas (contrast) of the foreground image.

Red: Use this control to adjust the gamma of the red channel in the foreground image.

Green: Use this control to adjust the gamma of the green channel in the foreground image.

Blue: Use this control to adjust the gamma of the blue channel in the foreground image.



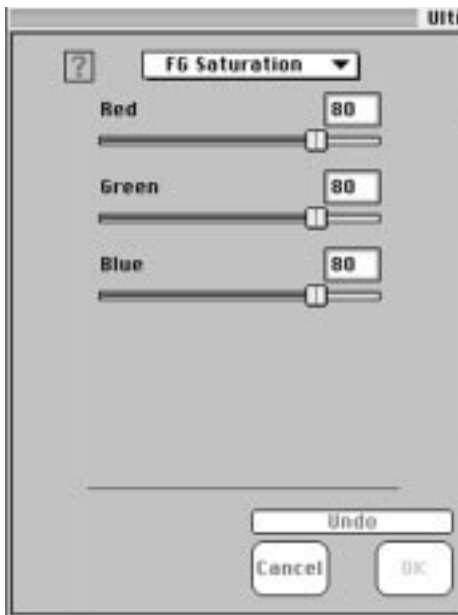
FG BLACK

The controls on this menu are used to adjust the RGB blacks of the foreground image.

Red: Use this control to adjust the black of the red channel in the foreground image.

Green: Use this control to adjust the black of the green channel in the foreground image.

Blue: Use this control to adjust the black of the blue channel in the foreground image.



FG SATURATION

The controls on this menu are used to adjust the RGB saturation of the foreground image. Saturation affects the chroma (color) level of the image without affecting its luminance level.

Red: Use this control to adjust the saturation of the red channel in the foreground image.

Green: Use this control to adjust the saturation of the green channel in the foreground image.

Blue: Use this control to adjust the saturation of the blue channel in the foreground image.

MATCHING BACKGROUND TO FOREGROUND WITH COLOR CONFORMANCE

Switch the View pull down menu to Composite. Switch the Controls pull down menu to the appropriate background color menu (BG Level, BG Black, BG Gamma).

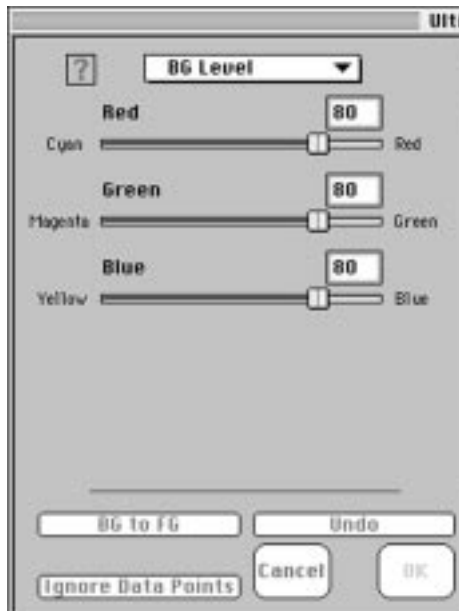


While holding down the shift key, use the eyedropper tool to select whites, blacks, or gammas (based on the chosen menu) from both the background and foreground scenes.

CLICK ON BG TO FG. The RGB values of the background



colorizers will automatically be set.



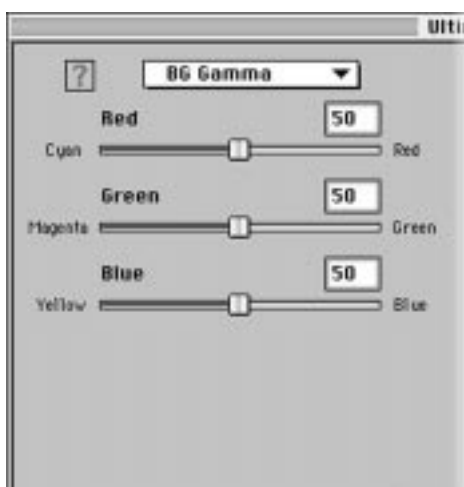
BG LEVEL

The controls on this menu are used to adjust the RGB levels of the background image.

Red: Use this control to adjust the level of the red channel in the background image.

Green: Use this control to adjust the level of the green channel in the background image.

Blue: Use this control to adjust the level of the blue channel in the background image.



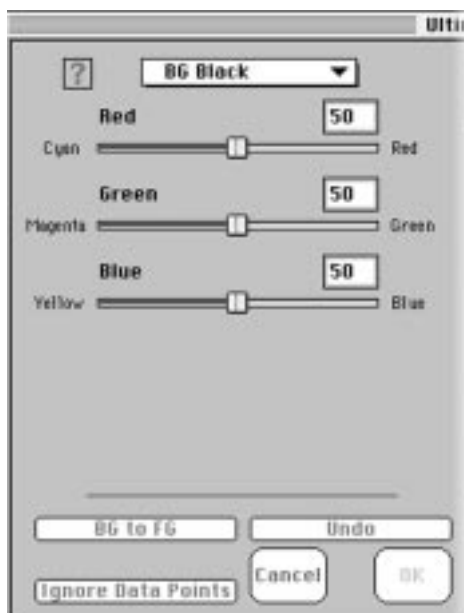
BG GAMMA

The controls on this menu are used to adjust the RGB gammas of the background image.

Red: Use this control to adjust the gamma of the red channel in the background image.

Green: Use this control to adjust the gamma of the green channel in the background image.

Blue: Use this control to adjust the gamma of the blue channel in the background image.



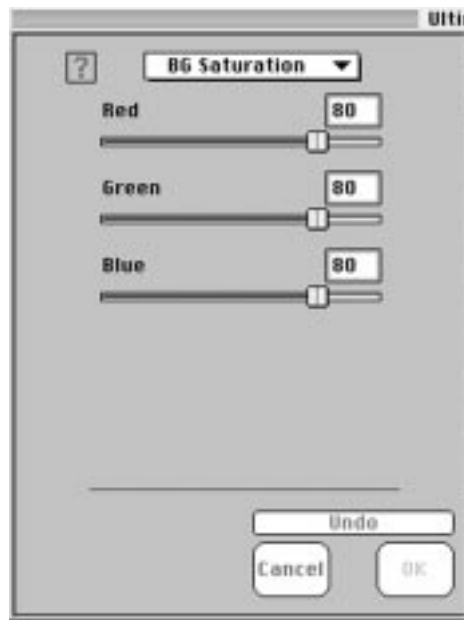
BG BLACK

The controls on this menu are used to adjust the RGB blacks of the background image.

Red: Use this control to adjust the black of the red channel in the background image.

Green: Use this control to adjust the black of the green channel in the background image.

Blue: Use this control to adjust the black of the blue channel in the background image.



BG SATURATION

The controls on this menu are used to adjust the RGB saturation of the background image. Saturation affects the chroma (color) level of the image without affecting its luminance level.

Red: Use this control to adjust the saturation of the red channel in the background image.

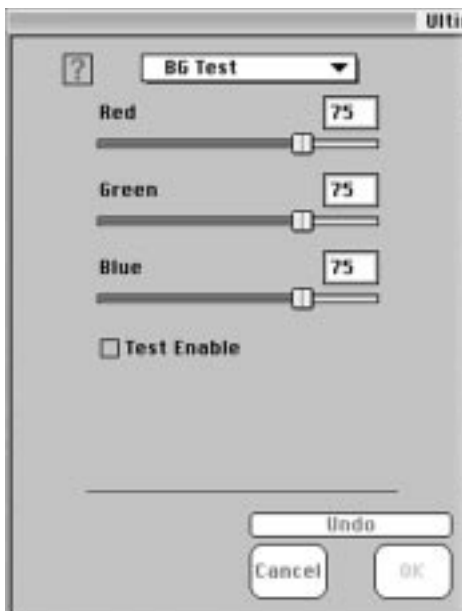
Green: Use this control to adjust the saturation of the green channel in the background image.

Blue: Use this control to adjust the saturation of the blue channel in the background image.

Lab Rat Tip:
With these controls, you'll
look like a colorist!
Tell your boss you
deserve a raise!



CREATING A TEST FIELD



TEST

When enabled, the controls in this menu are used to adjust the RGB values of a colored field to be used instead of a background image. This can be very useful when analyzing the quality of the composite. Be certain to uncheck the Test Enable box prior to rendering, or your image will be rendered against a solid field.

Red: Use this control to adjust the red level of the colorized field.

Green: Use this control to adjust the green level of the colorized field.

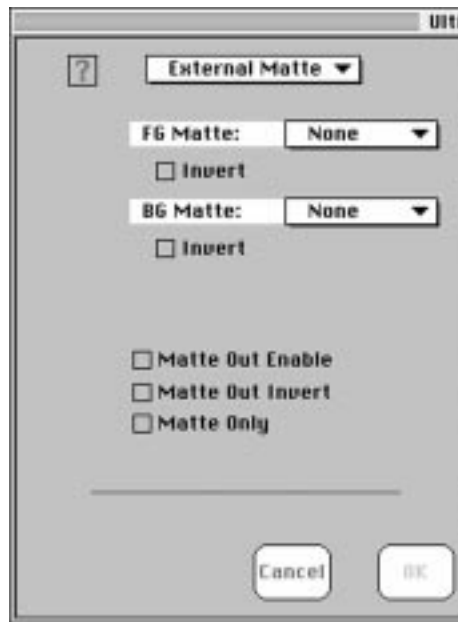
Blue: Use this control to adjust the blue level of the colorized field.

Professor Warhol Tip:
Make sure to uncheck the
Test Enable box before you
render, or the composite
will be against a solid field!



Ultimate

EXTERNAL MATTE



The controls on this menu alert the plug-in on how to handle both input and output mattes.

Note: To use FG Matte and BG Matte, there must be a corresponding alpha channel attached to either the foreground or background scenes.

FG Matte: Often referred to as a "Hold Out Matte". Using the alpha channel attached to one of the scenes, this control is used to force the masked areas of the foreground image to become opaque or to completely turn on the foreground.

None: FG Matte is disabled.

FG Image: FG Matte is attached to the FG Image.

BG Image: FG Matte is attached to the BG Image.

Invert: Reverses the black and white matte.

BG Matte: Often referred to as a "Garbage Matte". Using the alpha channel attached to one of the scenes, this control is used to force the masked areas of the background image to become opaque or to completely turn on the background.

None: BG Matte is disabled.

FG Image: BG Matte is attached to the FG Image.

BG Image: BG Matte is attached to the BG Image.

Invert: Reverses the black and white matte.

Matte Out Enable: When enabled, the plug-in adds the matte channel to the fourth channel of the output image.

Matte Out Invert: When enabled, the plug-in reverses the black and white matte.

Matte Only: When enabled, the output image will consist of only the matte channel. No composited image will be rendered.

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