Boris Red™ 3.01 GL Release Notes

Introduction

Welcome to Boris Red 3.01 GL. These Release Notes contain information regarding supported hosts, hardware and operating systems, known limitations, and other important information about the product.

For information on installing Boris Red 3.01 GL into your host application, see the Installation Guide which is included as a pdf file on your CD.

For information about Boris Red software updates, other Boris products, and additional resources, visit our web site at www.borisfx.com.

Supported Hosts

Boris Red 3.01 GL supports the following host applications. Because host versions update frequently, please visit our website at www.borisfx.com for information on supported versions for each host.

Macintosh	Windows
Adobe® Premiere® 6.0, 6.5	Adobe® After Effects® 6.0
Apple® Final Cut Pro® 3.0, 4.0 or later	Adobe® Premiere® 6.0, 6.5, Adobe Premiere Pro® 1.0
Avid® Media Composer®, Avid Symphony® 4.7, 4.8, Avid XpressMac®, Avid Xpress DV® 3.0, 3.5.4, Avid Xpress Pro®4.0 or later	Avid® Media Composer®, Avid Symphony®, Avid Xpress®, Avid Xpress DV® 3.0, 3.5.4, Avid Xpress Pro® 4.0 or later
Media 100® Media 100 i® 8.1,	DPS® Velocity® 8.2
	IMC® Incite® 3.0
	In:Sync® Blade® 2.2, In:Sync Speed~Razor® 5.5
	Media 100® iFinish 4.6
	Pinnacle purple®, Pinnacle silver® 4.01, Pinnacle Edition® 5.0
	Sony® Vegas® 4.0
	Ulead Media Studio Pro®6.5, 7.0

Supported Operating Systems

Red 3.01 GL supports the following operating systems.

Macintosh

Macintosh OS X v10.2.6 and above (see note below). Red 3.01 GL does ***not*** support Macintosh OS Classic 9.x.

To take advantage of the new OpenGL features in Red 3.01 GL, you must install Macintosh OS 10.2.6 or later. Final Cut Pro 4.x users must install Macintosh OS 10.3.

Windows

Windows 2K®, Windows XP®

Minimum System Requirements

We recommend at least 512 MB of memory assigned to the host application for both Macintosh and Windows users using Red 3.01 GL

To run Boris Red 3.01 GL, QuickTime version 6.0 or later must be installed on your system. An installer for QuickTime for Windows is included on the Boris Red CD. QuickTime 6.0 is automatically installed on Macintosh OS X systems. Boris Red 3.01 GL supports dual processors, Hyper Threading, and Altivec acceleration.

New Features in Red 3.01 GL

See the separate ***Red 3.01 GL New Features.pdf*** document for explanations of all of the new features introduced since Red 2.x. Red 3.01 also includes the following features introduced after Red 3GL was released.

More Flexibility for Pie Charts

A new **Series menu** appears in the Chart tab for Pie Charts. This allows more flexible data import. Previously, you could only import row-based data into Pie Charts. The **Series menu** lets you orient the chart to include rows or columns as a series.

- ***Rows as Series*** places the rows vertically in the chart. The information in the first row appears in the Legend (if the **Enable Legend checkbox** is selected in the Legend tab).
- ***Columns as Series*** places the columns vertically in the chart. The information in the first column appears in the Legend (if the **Enable Legend checkbox** is selected in the Legend tab).

Apply Two Motion Tracker filters to the same track

In Red 3.01, two Motion Tracker filters can be applied to the same shape or filter track. Previously, only the top-most Motion Tracker filter was recognized. For example, this is useful when motion tracking both ends of the wire in the Wire Remover filter.

Time Filters enabled for Host Media in Media 100 i

Time filters are now enabled for host media in Media100 i. These filters were previously disabled in this host because M100 did not provide alternative time frames to plug-ins. Beginning with v8.21 this condition has been fixed.

OpenGL Enabled in Final Cut Pro 4.1

OpenGL is now fully enabled for FCP 4.1 when you run Macintosh OSX 10.3. Previously Open GL was not available to Boris in this version of Final Cut Pro with earlier versions of the Macintosh OS.

New Quit and Save As Behavior

When you quit Red 3.01 GL, the name of the saved setting is displayed and saved when you press **OK**. The application then quits, which eliminates the extra dialog box that you previously had to dismiss.

If you want to save the open setting with another name, you can press **Cancel** and then save your setting. If the setting has not been saved previously, the dialog prompts you to save it.

New Preview to RAM Behavior

When audio is disabled, Preview to RAM now loops the playable frames, rather than playing the frames then holding the last frame for the full (or in/out) duration.

Project Window Improvements

The active composition in the Project window (in Frame view, List view, or Render Queue view) is framed with a blue outline, which is different than the selection color. This indicates the composition that is open in the timeline and saves when you choose **Save Composition**.

New Project Window Sorting

Red 3.01 provides friendlier sorting of compositions in Frame, List and Render Queue views. Columns now sort more logically when they contain numbers (i.e. 10 sorts after 9, not after 1). This ordering is regardless of where the numbers occur in the name.

New Naming Scheme for New and Duplicated Compositions

When you create a new Composition, duplicate names are now avoided. Previously when you created a Project and saved a copy of the Composition several times, you could easily create confusion with several compositions of the same name. Duplicated compositions are named with "***_1***", "***_2***", etc. The **Save Composition Copy** command automatically appends "***_1***" after the name. If you edit the name of ***Composition 1_1*** and choose **Save Composition Copy**, you get ***Composition 1_1_1***, so you can see your version history.

Fixed Bugs in Red 3.01 GL

Red 3.01 GL fixes many limitations that existed in Red 3GL. These include:

- An issue with QuickTime export movies has been fixed, which previously caused a crash in certain hosts plug-ins (primarily on Windows AVX hosts). This crash could also occur when selecting the QT codec.
- ***Avid Xpress DV, Xpress Pro and Adrenaline only:*** Previously, Red's Preview to Monitor feature didn't work in these Avid versions. This feature now works in Red 3.01.
- ***Final Cut Pro 4.0 only:*** The Red banner in the Effect Control tab no longer disappears after you apply an effect.
- Dragging an animated spline track into the mask track of another track now correctly preserve the keyframe animation.
- Spline track keyframe timing information is now properly preserved when tracks are copied.
- ***Windows only:*** The Plugin Filter Manager no longer crashes when duplicating a Filter set, in certain situations.
- ***Windows only:*** Font styles are now stored with a ***.B2F*** extension instead of ***.B2D***. This prevents the Text Styles and Font Styles from overlapping and appearing in the same tab in the Style Palette.
- Red 3.01 fixes situations where the Render thermometer did not update when you worked with either OpenGL enabled, or on an MP system in High Quality mode.
- Switching vertically from track to track in the timeline using the keyboard now properly synchronizes the OpenGL interactors shown in the Composition and Preview windows.
- Deleting the last used Library Browser folder and then launching Red no longer causes Red to hang when trying to restore that folder as the current one.
- The Render Thermometer now updates more consistently.
- ***Windows only:*** Old tool tips no longer randomly display in the Controls window when you hover over unrelated areas.
- The **Delete** key now deletes selected items in the Style Palette.
- The display of multiple selected items in the Style Palette now indicates the current selection when you Shift-select.
- You can now select contiguous items in a table using by pressing **Shift** and scrolling the mouse wheel.
- ***Position X*** and ***Position Y*** no longer act as if they are locked together in the Fire Filter.
- ***Macintosh only:*** Repeatedly pressing **Page Up** or **Page Down** now works properly when a non-Timeline window is active, except when a text editing field is open.
- Using the Mouse Wheel to switch a track selection no longer causes the last adjusted parameter in the Controls window to copy to the newly selected track.
- ***Windows only:*** You can now successfully apply styles to text in the Text window.
- The Create Cross Platform Movie checkbox has been removed from the Movie Export Settings dialog. Movies are now automatically created crossplatform.

- The BCC Fast Blur filter no longer crashes if the height of the source is greater than its width. This was previously a problem when the filter was applied upstream (on the face track) to media, or with a vertically oriented project.
- ***Windows only:*** Red 3.01 GL improves low-memory handling in the BCC Fast Blur filter.
- The performance of the Stars filter has been greatly improved.
- Previous audio files that could not play properly in Preview To Ram with Audio can now play in Red 3.01 GL. These tended to be uncompressed WAV or AIFF files.
- Missing font names are now properly remembered, so you no longer see multiple messages complaining that the same font is missing.
- ***Macintosh only:*** Occasions where the scroll bars at the edges of windows disappeared have been fixed.
- ***Macintosh only:*** Audio tracks in the Project window remain as audio tracks when dragged into the timeline, they are no longer converted to movie tracks.
- ***Macintosh only:*** OpenGL performance has been improved when working with scaling down large textures (for example, 2K+ wide images).
- If you open a movie file as an audio track then open that same file as a movie file, when you change the start time of either track, it no longer affects both.
- Instances where the **Caps lock feature** didn't work correctly in the Composite window have been fixed.
- The **Toggle Face/Shape Track Selection button** now works correctly for containers.
- Motion tracking filters no longer contain hidden points in the Tracker Preview window.
- ***Windows only:*** When using Title Containers and switching between the animation styles, the keyframes now reset so the container animates correctly.
- The Motion Tracker filter ***Apply menu*** is no longer empty when you apply it downstream in a Shape track.
- ***Windows only:*** The Motion Tracker filter can now be dragged from a Face track to a Shape track.
- The Motion Tracker filter is now applied downstream (to the Shape track, not the Face track) by default.
- The Title Container ***Position Y*** (Roll) and ***Position X*** (Crawl) parameters no longer reset when certain other values are changed.
- Installing a large number of presets for BCC filters no longer increases the rendering time. The parameters in these filters no longer become less responsive.
- The ***Position X*** and ***Position Y*** parameters no longer act as if their interpolation is linked when changing from an interpolation other than ***Ease In/Out,*** to ***Ease In/Out***.
- ***Windows only:*** 3D Sphere effects with Motion Blur enabled no longer render opaque, or crash in specific instances.
- You no longer crash with OpenGL enabled if you nest a track five times and adjust the first shape in the nest.

- ***Final Cut Pro 4.0 only:*** When you use Red as a Transition in Final Cut Pro 4.x, the Red Preferences are now respected. This means that when you relaunch Red as a Transition, changes you make to Quality, Resolution and other Red Preferences no longer need to be reset each time.
- ***Windows only:*** Many keyboard shortcuts that previously displayed incorrectly have been fixed.
- When you create spline effects using the **Add Extruded Pencil button** with animated borders, the effect no longer exhibits frames that appear different after rendering than they did when previewing the effect.
- The ***Reveal Animation*** and ***Remove*** now appear correctly in Area Charts.
- ***Windows only:*** The BCC Film Damage filter ***Hair*** parameter now functions correctly.
- Checkboxes and menus from the Controls window no longer display as ***Option Change*** in the History Palette.
- Preview to RAM now plays just the rendered section, rather than the entire timeline.
- If you change the media for an EPS file to a spline object, you no longer crash.
- Preview to RAM at Half Rate and Preview to RAM at Quarter Rate now preview the entire duration at their given rate.
- ***Windows only:*** If you press the Boris logo at the top of the Tools window, you no longer receive a memory error.
- ***Media 100 iFinish only:*** iFinish now passes the 16:9 ratio to Red in transition mode only. The Composite window no longer reflects 4:3.
- Changing font size on Chart Legends now changes the size of the squares accordingly and the circles remain the same size.
- If you change a Fade Animated Chart from Flat to Extruded, the animation now works correctly.
- Enabling values and a legend on an Area Chart no longer causes their values to display underneath the chart.
- Resetting a chart now fully resets any color changes you made.
- ***Windows only:*** Oversized images used as media for a background track now show up correctly when OpenGL enabled.
- ***Windows only:*** Keyframes now display correctly in the timeline when you create them by moving OpenGL interactors if one of the position's interpolation is set to Constant.
- When you map media with an alpha channel to a Cube shape with multiple faces, you no longer see different media for the sides of the cube in OpenGL vs. Non-OpenGL modes.
- Spline shapes no longer shift if you draw a shape with the Brush tool then select the Arrow tool.
- If you have multiple tracks selected in the timeline and move them, the timeline now correctly displays the moved tracks.
- All settings from the Keyframe Library **Backgrounds** category now render correctly when you apply them with OpenGL enabled.

Support for Automatic Duck Composition Import

Red supports Automatic Duck Pro Import to bring host sequences from Final Cut Pro and Avid systems into Boris Red. Supported effects are translated, and your timeline is recreated as a composition in Boris Red. In addition, your media and composition are added to the Project window. An installer for Automatic Duck Pro Import LT is included on the Boris Red 3.01 GL installation CD. This is a 30-day, fully-functioning demo.

For more information, see the **Activation Guide.pdf** and the **How to get a Serial Number.pdf** documents located on the Red CD or visit ***www.automaticduck.com***. For information on using Automatic Duck, see Appendix B, "Working with Hosts," in Volume I of the Red User Guide.

Supported Hardware and Drivers

You need the following hardware and system requirements to use the new hardware dependent features in Red 3.01 GL. For detailed information on the OpenGL feature in Red 3.01 GL, see the Understanding OpenGL pdf on your Red CD or Volume I in the Red User Guide.

Important Note on OpenGL Support

Due to the fast rate at which GL card manufacturers release drivers, Red may disqualify your OpenGL hardware erroneously. If this happens, you should try to enable OpenGL to see if you benefit from GL acceleration. If you have troubles with slowness, or render inconsistencies, please disable GL. For information on enabling OpenGL, see "Enabling OpenGL" on page 13.

While OpenGL may work in the Red Engine, that does not necessarily mean it will work inside your host application. This is due to the fact that some hosts use Open GL memory, leaving it unavailable for Red when you work inside the host.

If your host crashes when trying to apply Red, and you cannot disable OpenGL in your host, please contact our technical support staff. They willsend you a preferences file that will start Boris Red with Open GL disabled.

BorisFX will make every effort to continue to qualify OpenGL cards and driver versions. However, it is important to note that it is impossible to qualify all combinations of Open GL cards, operating system, drivers and host applications.

Supported OpenGL Hardware

The following graphics cards and drivers are supported for the new OpenGL features in Red 3.01 GL. This list is current as of the initial Red 3.01 GL release. Boris FX maintains an updated list of tested video cards on our web site: www.Borisfx.com.

OpenGL is a cross-platform standard that accelerates the rendering of 2D and 3D graphics. Most newer video cards have hardware-based OpenGL acceleration. If your system does not include the recommended minimum requirements, Red initially defaults OpenGL to Off. You can re-enable OpenGL in the Red Preferences window. For detailed information on how to use OpenGL, see Volume I in the Red User Guide.

Final Cut Pro 4.x users must have Macintosh OS 10.3 installed in order to support Red's OpenGL feature.

You can still use Red 3.01 GL without OpenGL or with an older card, you just won't gain as much acceleration while working.

Graphics Card

- NVidia GeForce
- NVidia Quadro
- ATI FireGL (See the ATI note below.)
- ATI Radeon (8000 and later) (See the ATI notes.)
- ATI Rage 128 (Macintosh Only) (See the ATI notes.)
- Matrox Parhelia

Note for NVidia users: The NVidia GeForce 2 is not supported for OpenGL in Red 3.01 GL.

Note for ATI users: ATI model cards that are TNT enabled are not supported for OpenGL in Red 3.01 GL.

Note for ATI Radeon users: You may need to adjust the ATI Radeon control panel for OpenGL to work in Red. The ATI Radeon control panel is a modification to the Win display settings and provides several options and modifiers for your card. The ATI Radeon control panel is a separate download/install, and is not the actual ATI Radeon driver. In the ATI Radeon control panel, go to the OpenGL Tab and move the **Performance-Balance-Quality slider** all the way to ***QUALITY***. If you do not adjust this slider, you may see display problems such as rainbow type artifacting in the Composite window when OpenGL is enabled.

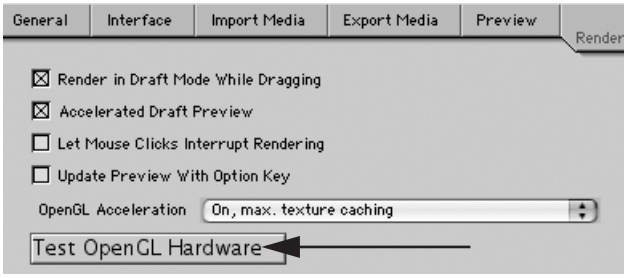
Note for all ATI users: The only supported and tested driver for Red 3.01 GL is the 6.14.10.4010 driver, which was the latest ATI driver available at the time of the Red 3.01 release. This number displays in the test OpenGL window within Red. These drivers are available on the ATI web site and were posted on 7/15/03.

Note for Matrox Parhelia users: The Matrox Parhelia card is not recommended for Red users running Ulead Media Studio Pro. See "Important Information for Ulead Users" on page 20 for more information.

Checking your OpenGL Hardware, Software, Drivers and Settings

The first time you launch Boris Red 3.01 GL, an internal test is run on your system to determine whether your hardware meets the minimum requirements necessary for OpenGL Hardware acceleration. If your hardware does not meet the minimum requirements, OpenGL is disabled by default on your system.

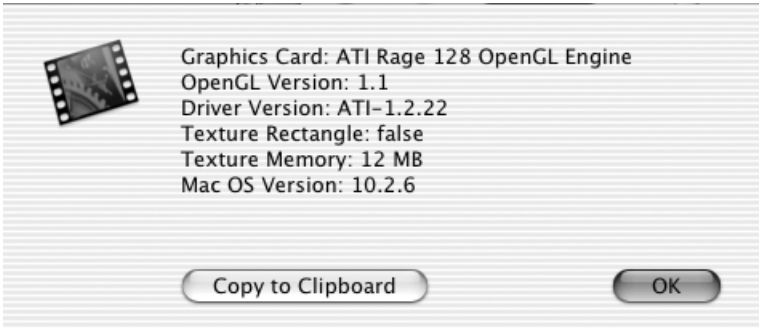
To perform the OpenGL Hardware test manually, click the **Test OpenGL Hardware button** in the Preferences window's Render tab.



Depending on the amount of memory your graphics card has, this test may take a few minutes to run.

After the test is run, a window displays specifics of the hardware and drivers installed on your system which are necessary to run OpenGL. If any test results show your system may have problems running OpenGL, the errors are detailed in this window.

If you want, click the **Copy to Clipboard button** to copy this information to your system and clipboard. This allows you to print or email this information. When you finish, click **OK** to close this window.



Depending on your system, the test may take a few seconds to complete. The test stresses your OpenGL hardware, so you should run the test with a typical workload on your system. Before you run the OpenGL hardware test, launch any graphics applications that you usually run while you edit (any graphics intensive applications you are running at the time may affect the results).

Red 3.01 GL uses the following guidelines for optimal OpenGL performance. Some of this information does not affect Red's hardware testing but is useful for technical support if you are having OpenGL problems:

- **Graphics Card--** See the table and notes on page 9. Also see the updated list on the Boris FX website.
- **OpenGL version--**Should be 1.2 and higher.
- **Driver Version--**See the table and notes on page 9. Also see the updated list on the Boris FX website. As a general rule, driver versions created in 2003 should be installed. ATI Users must display 6.14.10.4010 as their Driver Version. See the note for ATI Users on page 10 for more information.
- **Texture Rectangle--**This is an advanced OpenGL image sizing feature. If you are having OpenGL problems, this provides useful information for technical support.
- **Texture Memory--** Texture Memory displays the amount of memory on the video card available for Red to use for textures (layer images).To use Red 3.01 GL without display or performance problems, Texture Memory must be at least 32MB. Texture Memory available is not the absolute of memory on your card, but rather the amount available to Red.
- **Texture Dimension** displays the maximum texture size that can be used with the video card.
- **Macintosh OS Version** displays the installed version of the Macintosh OS (if you are running on a Macintosh system.) Macintosh users must have at least Macintosh OS 10.2.6 installed to support OpenGL; Final Cut Pro 4.x users, must have at least Macintosh OS 10.3 installed to support OpenGL.

OpenGL Errors

When the OpenGL Hardware Test is run, error messages may display if your system fails. These errors display as Hardware Status errors or Critical Testing errors.

Hardware Status errors report the status of your current system setup against Red's recommended card manufacturer, model and driver. These errors do not prevent you from using OpenGL, they just warn that your specific system and setup may cause problems with OpenGL. Hardware Status errors can include messages such as insufficient available texture memory or reports that your card was not recognized by Red's internal hardware testing. When you receive a Hardware Status error, OpenGL is automatically disabled when you launch Red. However, you can manually enable OpenGL in the Red Preferences window.

Critical Testing errors report errors that will not allow you to use OpenGL in Red. When you receive a Critical Testing error, OpenGL is automatically disabled when you launch Red. If you receive a Critical Testing error, you should not enable OpenGL or you may crash.

Final Cut Pro 4.0 users must have Macintosh OS version 10.3 installed in order to support Red's OpenGL feature.

Certain errors are influenced by the display properties set on your video card. The display property settings are card-driver specific. As a general rule, the display properties should be set to 32 bits of color, with the depth buffer set to at least 16 bits. On many cards the OpenGL capabilities are reduced when higher display resolution and refresh rates are set.

Enabling OpenGL

You can enable OpenGL in the Preview menu or in the Preferences window.

- To enable OpenGL in the Red Preference window, choose Edit > Preferences (Windows) or Boris Red > Preferences (Macintosh). Click the Render Tab and select the **Accelerated Draft Preview checkbox**. Choose the appropriate choice from the **OGL Acceleration menu**. ***On, Max. texture caching*** provides the best performance and is the recommended setting.
- To enable OpenGL in the Preview menu, choose Preview > Open GL Mode. Choose the appropriate choice from the submenu. ***On, Max. texture caching*** provides the best performance and is the recommended setting.

Troubleshooting OpenGL Issues

To toggle OpenGL off, use the keyboard shortcut Command or Control-[. To turn it back on, the keyboard shortcut Command-] (Macintosh) or Control-] (Windows). Menu choices also appear in the Preview menu and in the Preferences window. You can still use Red 3.01 GL without OpenGL or with an older card, you just won't gain as much acceleration.

Display problems such as white, rainbow or garbage images in the Composite window may be related to OpenGL. If this occurs, open the Preference window. In the Render tab, change the **OpenGL Acceleration menu** to use less texture caching. Texture caching is used for textures (layer images) and is related to the amount of Texture memory on the video card. Display problems related to OpenGL will not affect your rendered effects.

If you experience OpenGL problems, setting the **OpenGL Acceleration menu** to use less texture caching improves OpenGL reliability, although it lessens OpenGL performance.

Supported Preview to Monitor Hardware

You can now output video to an external monitor through a FireWire converter box or through supported video hardware connected to your system. You can output media at any project size and immediately view your working frame without rendering the timeline.

Some hosts have native Preview to Monitor (PTM) where Red passes a frame and the host displays it. If a host has this ability, for example Avid, then nothing changes from the Red 2.x capabilities. However, if a host did not have native PTM ability, then you can use the new Preview to Monitor feature. The user does not have hardware choices in the Preferences window if Red uses native host PTM (since the host controls the hardware connection).

The plug-in version Red can only use the FireWire output if the NLE releases it while Red is running. A number of hosts (for example Premiere and FCP) will not release control of the primary display hardware. This prevents Red's Preview to Monitor feature from working either in the plug-in or the Red Engine until the NLE releases control of the FireWire hardware.

However, Red looks for all possible output devices upon installation, and lists the results in the Device menu in the Preview tab of the Boris Red preferences. As a result, users may be able to use a different output device for Red than the one that the host application uses. The host application may use its own capture hardware for display, leaving the FireWire port available.

Video-out capabilities are also available in the standalone Boris Red Engine. This enables anyone with supported video hardware, whether built into their computers, included with their NLEs, or provided through third parties, to see the work they create in Boris Red immediately on television monitors.

Red 3.01 GL supports the following video cards for the new Preview to Monitor (PTM) feature in both the Red Engine and while using Red in your host. For detailed information on the new PTM feature, see Volume I of the User Guide.

Make sure you have the latest drivers installed for the supported video cards.

Supported PTM Cards

- Cinewave®
- Matrox ®Parhelia®
- AJA® Xena®
- Canopus® RT® (See note below.)

Note for Macintosh Users: Most cards supporting standard QuickTime video out capabilities and drivers should work.

Note for Windows Users: Although the previous cards were internally tested and approved, other cards may work as well. We also support standard FireWire out. Many Canopus RT boards work, although we cannot guarantee they all will.

Note for Final Cut Pro version 3.0 Users only: FCP 3 users running Red as a plug-in with FireWire for Red's Preview to Monitor feature, must disconnect before clicking the **Apply button** or FCP will crash. To disconnect, choose Preview > Disconnect External Monitor.

Note for Final Cut Pro version 4.x Users only: Red's Preview to Monitor feature does not work in Final Cut Pro 4.x.

Note for Avid Users: Red's Preview to Monitor feature works for Xpress DV, Xpress Pro, and Adrenaline models only. All other Avid products can use the existing AVX Preview to Monitor feature within Red. The AVX Preview to Monitor allows you to see video in an external monitor without the extra step of selecting your hardware in Red's Preference window.

Once the hardware is connected, choose Connect to Monitor from the Preview menu. Commands in the Preview menu allow you to set the video display. You can output media at any project size and immediately view your working frame without rendering the timeline.

When you choose Display Frame on Monitor from the Preview menu or click the **Display Frame to Monitor button** in the upper-right corner of the Composite window, the image displays on the external monitor, using the Resolution and Quality settings specified in the Composite window.

When you choose Display HQ on Monitor from the Preview menu, the image displays on the external monitor, using the Full Resolution and High Quality settings, regardless of the Resolution and Quality settings in the Composite window. When you choose Auto-Update Monitor from the Preview menu, every frame of your effect previews to the external video monitor connected This allows you to drag the CTI in the timeline and view updating frames. This option is not available in some host applications or system configurations.

Once the hardware is connected, configure the Red Preferences to use this feature. See the next section for details.

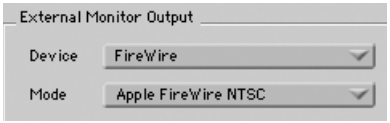
Enabling Preview to Monitor

Note for Final Cut Pro version 3.0 Users only: FCP 3 users running Red as a plug-in with FireWire for Red's Preview to Monitor feature, must disconnect before clicking the **Apply button** or FCP will crash. To disconnect, choose Preview > Disconnect External Monitor.

To enable the Preview to Monitor feature, launch Red and open the Preferences window.

1. Choose File > Preferences (Windows), or Boris Red > Preferences (Macintosh).
2. Click to select the Preview tab.
3. In the External Monitor Output section, choose your Firewire Converter box or Video hardware board from the **Device menu**.

   The Device menu displays all the supported hardware connected to your system.



4. Choose an option from the **Mode menu** if applicable. For example, if you are using a Firewire Converter box, you can choose ***PAL*** and ***NTSC*** formats from the Mode menu.
5. Click **OK** to save your settings and exit the Preferences window.

The Preview to Monitor preferences save and apply to all Red projects unless your Red 3.01 GL preference file is rebuilt.

Displaying Frames on your External Monitor

Commands in the Preview menu allow you to set the video display:

- When ***Connect to External Monitor*** is chosen in the **Preview menu**, Preview to Monitor is enabled and the following three options in the menu become available:
- When you choose ***Auto-Update Monitor*** from the Preview menu, every frame of your effect previews to the external video monitor. This allows you to drag the CTI in the timeline and view updating frames. The image displays on the external monitor, using the Resolution and Quality settings specified in the Composite window.

Enabling Auto-Update Monitor slows Red since every frame updates in the external monitor.

- When you choose ***Display Frame on Monitor*** from the Preview menu or click the **Display Frame to Monitor button**  in the upper-right corner of the Composite window, the current frame displays on the external monitor, using the Resolution and Quality settings specified in the Composite window.
- When you choose ***Display HQ Frame to Monitor*** from the Preview menu, the image displays on the external monitor, using Full Resolution and High Quality settings, regardless of the Resolution and Quality settings in the Composite window.

Disconnecting Preview to Monitor

To disconnect Preview to Monitor (for example if you want to connect another device to your video board while editing with Boris Red), exit Red. When you relaunch Red, the external monitor is not connected until you choose ***Connect to External Monitor*** in the Preview menu.

Tips for Using the Preview to Monitor Feature

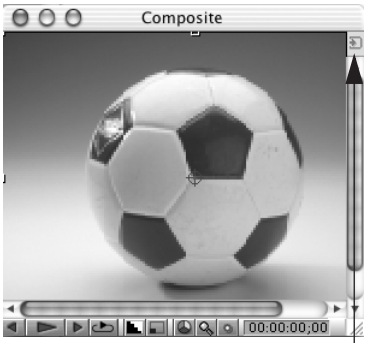
Note for Final Cut Pro version 3.0 Users only: FCP 3 users running Red as a plug-in with FireWire for Red's Preview to Monitor feature, must disconnect before clicking the **Apply button** or FCP will crash. To disconnect, choose Preview > Disconnect External Monitor.

Note for Final Cut Pro version 4.x Users only: Red's Preview to Monitor feature does not work in Final Cut Pro 4.x.

Note for Avid Users: Red's Preview to Monitor feature works for Xpress DV, Xpress Pro, and Adrenaline models only. All other Avid products can use the existing AVX Preview to Monitor feature within Red. The AVX Preview to Monitor allows you to see video in an external monitor without the extra step of selecting your hardware in Reds Preference window.

- Preview to Monitor automatically disconnects when you exit Red 3.01 GL. This means each time you launch Red, you need to choose Preview > Connect to External Monitor in order to reconnect and see your image on the external monitor.
- To change the Preview to Monitor device or mode, disconnect Red 3.01 GL's Preview to Monitor feature by choosing **Disconnect External Monitor** from the ***Preview menu***. Enter the Red 3.01 GL Preference window's Preview tab to choose a new Device or Driver from the **External Monitor Output menus**. You can also reconnect via the Preview menu with those new settings in the same session.
- Displaying images on an external monitor requires compressing and resizing the images. Red 3.01 GL may run slower if you have Auto Update enabled. Deselect **Auto-Update Monitor** in the Preview menu to remain connected to the external monitor but not automatically update frames.

  Manually update frames to your external monitor by choosing Preview > Display Frame to Monitor, or Preview > Display HQ Frame to Monitor, or by pressing the **Display Frame to Monitor button** on the upper-right corner of the Composite window.



Important Note on Missing Filters

Several BCC filters are not included on the Boris Red 3.01 GL installation CD. Instead, the BCC DeGrain, BCC Match Grain, BCC Motion Blur, BCC Radial Blur, and BCC Spiral Blur filters are available as a free download to registered users. These filters are available on the Downloads page at www.borisfx.com.

You must register Boris Red 3.01 GL to be eligible to download the BCC DeGrain, BCC Match Grain, BCC Motion Blur, BCC Radial Blur, and BCC Spiral Blur filters. See the Install Guide PDF on your Red 3.01 GL CD for details on registering.

Important Information for Avid Users

Avid users can now apply Boris Red as a filter to titles created with the Avid Title tool.

Applying Boris Red as a Title-Matte Effect

You can apply Boris Red directly to titles created in the Avid timeline. For example, if you have a bin with saved titles, you could apply a filter to the titles in Red.

1. Edit an Avid title or matte key into the Avid timeline.

2. Open the Avid Effect Palette and select Boris Red from the Effect categories.
3. From the list of available Red effects, drag the ***Boris Red Title-Matte Effect*** to the title or matte key in the Avid timeline.

Dragging the Title-Matte effect onto an Avid title or matte key is a destructive process which replaces the title or matte key. Additionally, removing a Title-Matte effect removes the title's nested alpha channel. To remove a Title-Matte effect and preserve the title or matte key, use the Undo command instead of the Remove Effect command.

4. Click the **Other Options button** in the Avid Effect Editor to launch the Red interface and create your effect.

If the title or matte key looks blocky when Red opens, select its Face track in the timeline. In the Host Media tab, choose ***Straight Alpha*** from the **Key menu**. This usually happens automatically.

Replacing a Title-Matte Effect

Since a title is replaced by applying the Title-Matte effect, to re-edit a title with a Title-Matte Effect (for example to change the text or a font) you must save the Title-Matte effect while you are in Red (in the File menu). Recreate the Avid title and overwrite the older title in the Avid timeline. Drag a Red Title-Matte Effect to the new title. In Red, open the saved effect and apply it to the new title.

Avid Systems and Preview to Monitor

Red's Preview to Monitor feature works for Xpress DV, Xpress Pro, and Adrenaline models only. All other Avid products can use the existing AVX Preview to Monitor feature within Red. The AVX Preview to Monitor allows you to see video in an external monitor without the extra step of selecting your hardware in Reds Preference window.

Workaround to Rendering Problem in Xpress Pro

A simple workaround has been discovered for the rendering problems affecting AVX 1.5 plug-ins running in Avid Xpress Pro. The problem can be avoided by rendering these effects while in Xpress Pro's Green dot mode.

The problem is not unique to Boris plug-ins; it affects other AVX 1.5 plug-ins as well. The problem is as follows.

AVX 1.5 plug-ins in Avid Xpress Pro may see a problem in rendered effects that appears as two distinct symptoms:

- A render glitch that appears as a vertical stretch on the first field of the first frame of an effect applied as a filter
- A softening of the video image in rendered effects (noticeable even on a straight "pass-through" effect)

This occurs using Boris AVX 1.5 products (Red, Boris FX, Graffiti) in Avid Xpress Pro on both Windows and Macintosh, but does not occur in Avid Xpress DV or other Avid non-linear editors.

Boris FX is working with Avid to fix this problem in an upcoming Avid XPress Pro release. This problem was not corrected in the recent 4.1 release. Until the problem is corrected, render effects in Xpress Pro's Green dot mode. Once Avid corrects the problem, we expect that users will be able to render AVX 1.5 effects in both Green dot and Blue dot modes.

Important Information for Final Cut Pro Users

Final Cut Pro 4.x users must have Macintosh OS version 10.3 installed in order to support Red's OpenGL feature.

Final Cut Pro 3 users running Red as a plug-in with FireWire for Red's Preview to Monitor feature, must disconnect before clicking the Apply button or FCP will crash. To disconnect, choose Preview > Disconnect External Monitor.

- Red's Preview to Monitor feature does not work in Final Cut Pro 4.x.
- Final Cut Pro 4.x users can now use Boris Red as a transition, taking advantage of a new architecture jointly developed between Boris FX and Apple. See Appendix B in Volume I of the Red User Guide for information on applying Boris Red as a transition.
- Red 3.01 GL includes a **Static Generator** for ***Final Cut Pro***. The Static Generator allows you to create a static slate which takes advantage of Final Cut Pro's real-time capabilities. When you apply the Static Generator, the Boris timeline opens with a duration of one frame which can then be applied to Final Cut Pro as a static slate.
- To edit an existing Red effect, make sure the time indicator is positioned on the effect you want to edit before launching Red. Otherwise, the Boris interface will not appear.
- Do not export from Boris Red unless the FCP resolution is set to 100%. Otherwise, you get reduced image quality, because FCP does not provide Red with full-size frames. Likewise, if Final Cut Pro is at less than full resolution (100%), previews at full size appear in reduced quality.
- In some instances the Boris Red 3.01 GL plug-in crashes due to an apparent conflict with MacsBug v6.6.3. If you have MacsBug 6.6.3 installed and experience crashing, try disabling or running an earlier version of MacsBug when using Boris Red.
- If both Red 3.01 GL and an earlier version of Red are installed within Final Cut Pro, the Effects menu lists both versions with the same name: Boris Red. The top item in the list is Boris Red 3.01 GL and the second item in the list is the earlier version. We recommend you uninstall earlier versions of Red when using Red 3.01 GL.

Important Information for Ulead Users

Due to a problem on Ulead's side, certain Ulead systems may display jagged edges or reversed fields in rendered Boris effects. If your system shows this problem, run the Ulead Field Swap utility found on the top level of the Boris CD in the Ulead Field Change folder. This utility is also available for download on the Boris FX web site. If you have questions about running this utility or whether your system exhibits this problem, read the Ulead.txt document included with the utility or email Boris technical support specialists at support@borisfx.com.

When using Boris as a transition in Ulead, the image quality for host media in the Composite window is very poor. Ulead does not pass a full size image. However, this does not affect rendering. The effect renders in high quality.

When Using Boris within Ulead with the Matrox Parhelia board, you may run into crashing problems. We do not recommend using the Matrox Parhelia board with Red running as a plug-in to Ulead.

Installing and Using Adobe After Effects Filters within Boris Red

Boris FX provides a supported list of AE filters for use inside Boris Red. For best results, use only supported AE filters inside Boris Red. An list of Supported, Conditionally Supported and Unsupported filters can be found on our web site: www.borisfx.com.

Supported filters were tested on single-processor machines. While these filters should also work in multi-processor machines, it is possible you will experience unexpected results or your machine may crash. If you have problems with supported filters in multi-processor machines, try disabling the MP functionality on your machine and recreating your filter effect.

Boris Red 3.01 GL includes four free DigiEffects Delirium filters: ***DE Day for Night***, ***DE Fog Factory, DE Fireworks*** and ***DE Electrical Arcs.*** These filters are installed in the Boris Plug-ins folder when you install Boris Red 3.01 GL. For more information about these filters, see the ***DigiEffects_info.pdf*** and the ***DeliriumUserGuide.pdf*** documents included on the Boris Red 3.01 GL CD. See the Known Limitations Filters section on page 32 for information on limitations using these filters in Red.

Note for Tinder Users: Tinder's Effect Viewer UI only works properly when the Red Composite window is set to Full Resolution. Additionally the Effect Viewer may disappear after dragging tracks around. Use the regular UI controls if you experience this problem.

Important Information on Using After Effects Filters

- Checkboxes and menus cannot be animated.
- Time remapping filters do not work in Boris Red.
- After Effects filters used inside Boris Red may take longer to render than most Boris Red effects.
- None of Adobe's built-in After Effects filters work inside Boris Red.
- Some of the After Effects filters need to be frame rendered. If renders appear noisy or jittery, deselect the **Better Quality Field Rendering checkbox** in the Boris Preferences window and re-render the effect.
- If you have more than 900 filters installed in Boris Red, you will not see some filters inside Boris Red. If you reach the filter limit, when you launch Boris Red a warning asks you to remove some files from the BorisPlugins folder and restart Boris Red. You can ignore the warning dialog and continue to work in Red but you will not have access to all the AE plug-ins inside the BorisPlugins folder. You can use the Plugin Filter Manager to hide the filters you don't need in Red. See Chapter 4, "Creating Effects "in Volume I of the User Guide for more information on using the Plugin Filter Manager.

Installing AE Filters for Macintosh

Macintosh users should place supported After Effects filters in the following folder:

System Folder (or Library)/Application Support/BorisFX/BorisPlugins

The filters appear in the Filters menu within Boris Red.

Installing AE Filters for Windows

Windows users should place supported After Effects filters in the following folder:

C:\Program Files\Boris FX, Inc.\BorisPlugins

The filters appear in the Filters menu within Boris Red.

Important Information about Exporting to Flash

Supported Effects

The following effects are supported for exporting as Vector to Flash.

- Text
- Spline media
- 2D Charts (which consist of text and spline shapes)

Other bitmap elements such as video or still graphics can be included in the exported Flash file and will be JPEG-compressed. In the Export preferences you can set the quality of the JPEG compression.

When you export text to Flash, any texture that was applied to the text is ignored.

When you export text with a gradient fill to Flash, the resulting .swf file is blank.

Red exports Flash .swf files that are compliant with the Flash 5 architecture. If you are using QuickTime to preview your exported .swf files, you need a version of QuickTime that supports the Flash 5 format.

Exporting as Flash

Boris Red allows you to export files in the Macromedia Flash (SWF) format. This feature allows you to export compositions as compact, vector-based files optimized for web viewing. For example, you could export a Type On effect to include on a web page.

The SWF format was designed primarily for animated 3D Line Art objects, so it works well when exporting settings that contain spline and text animations. Settings that contain video or animated bitmaps, however, generate rather large files. You might want to consider exporting such animations as a QuickTime or AVI file. See "Exporting Effects as Movies" on page 297 in Volume I in the Red User Guide for more information.

There are some limitations with the Flash export feature. You cannot export 3D Extrusion tracks as Flash. Settings that contain 3D Extrusion tracks export as a blank track. The Flash export feature does not support shadows or gradients used as Texture tracks. However, you can export a static gradient as a bitmap background.

To prepare to export to Flash, you should change any shape track containing EPS files, text, or Spline media to 3D Line Art shape. Because you cannot use the 3D Line Art shape with the Brush tool, you cannot export brush strokes as Flash.

To export a track as a Flash file:

1. Select the appropriate track in the timeline.
2. Choose File > Export > Flash.

   A dialog box appears that allows you to name and save the file.
3. Name the track and click **Save**.

   The composition is exported using the Flash Export settings, which are controlled by the Preferences window's Export tab.

For more information, see Chapter 4 in Volume I in the Red User Guide.

Important Note on Creating Time Effects within Boris Red

The following important notes pertain to Time filters, including Optical Flow.

- Exporting an effect containing a Time filter (including Optical Flow) with host media is NOT recommended. If you want to export from Red with Optical Flow (or any Time) filter in the timeline, you should use imported media in the source track.

  This is because most hosts will not give Red both fields at set-up (preview). In that case, the first field of each frame goes into the motion estimator. If the motion is small from one frame to the next, and/or includes little crossing motion, the preview appears close to the rendered output. However, if the motion is large, and/or includes a lot of crossing motion, it is important for the motion estimator to have access to both fields in order to see an accurate preview of the rendered result.
- Some hosts do not allow plug-ins to access host frames at different times. If your host does not allow Boris Red to access alternate frames, an "X" displays in the Composite window when you apply a Time effect to host video. If you run into this limitation, instead of applying to host video, set the source media for these filters to Movie media

files (QuickTime, AVI) instead. This may require exporting your timeline video from the host application as a movie. If you are using Media 100 i, you can easily bring in native Media 100 movie files through the Bin Browser.

Important Information about Working with Motion Filters

- You should use the Snap CTI to KeyFrame option (Track > Snap CTI to KeyFrame) when working with the Motion filters to avoid confusion. For example, this option is not selected and you move the CTI off a selected keyframe. Then you adjust the Search and Target parameters using on-screen controls. A new keyframe is not created. Instead, the selected keyframe is adjusted. This could cause your media to track incorrectly. If you want to create a new keyframe, you must deselect all keyframes before adjusting parameters on-screen.
- While Interpolation Fields appear next to the Search/Target tab parameters, you should not adjust the Interpolation. Leave the Interpolation set to Hold. Adjusting the Interpolation will not affect the tracking but may cause on-screen parameters to display incorrectly.
- You can work at Half or Quarter Resolution to achieve a preview of a motion filter. But if the motion tracker fails repeatedly, you may have to work at Full Resolution.
- You can only adjust the Search and Target regions in the Motion filter track's Preview window. The Source track does not display the region controls; the Composite window does not display the region controls.
- The field order of the media must match the field order setting in the Media tab. You can set this in the Import tab in the Preferences window. See Volume II in the Red User Guide for more information.

Important Information Using the KeyFrame Library

The first time you browse the KeyFrame Library effects within the Library Browser you must generate thumbnail images for the effects.

1. Open the Boris Library Browser, by choosing Window > Library Browser, clicking the **Open Library Browser button** in the timeline or pressing Command-9 (Macintosh) or Control-9 (Windows).

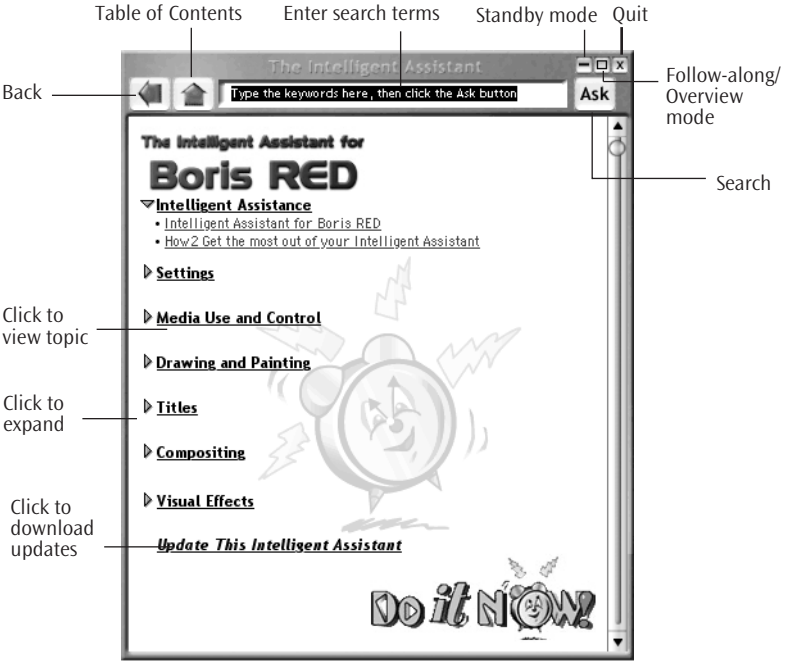
2. Select an effect or effect folder and click the **Generate Thumbnails button**. For more information on using the KeyFrame Library, see Volume I of the Red User Guide.

We recommend that when you build thumbnail previews for the KeyFrame Library, you do this in the Red Engine rather than within your host application. Because building previews actually renders your effect, this process can take as much as 25-30% longer in the plug-in than in the Red Engine.

Also Included with Red 3.01 GL

- Boris Red 3.01 GL installs four DigiEffects Delirium filters: ***DE Day for Night***, ***DE Fog Factory, DE Fireworks*** and ***DE Electrical Arcs.*** These filters are installed in the Boris Plug-ins folder when you choose the Boris Red Components install choice in the Red installer. For more information, see the ***DigiEffects_info.pdf*** documentation included on the Boris Red CD. See page 32 for information on limitations using these filters.
- The ***Intelligent Assistant*** is a sophisticated online help system fully integrated into Boris Red 3.01 GL. It is directly accessible from the Help menu and offers the equivalent of over 600 pages of text, with over three hours of narrated video to take you into as much or as little detail as you need, for any kind of task you might want to perform.

  Seamlessly integrated into Boris Red, the Intelligent Assistant operates in a resizable floating window above Red, so that you can easily work along with provided examples. Along with instructions for specific tasks, the Intelligent Assistant also provides insight into broader-based effects-creation strategies, a number of tutorials, and creative examples of finished projects using illustrated techniques. The Intelligent Assistant is fully searchable and hyperlinked. Its modular structure makes it easy to use. Users with internet connections can automatically download new content.



More information on the Intelligent Assistant is available in Volume I of he Red Users Guide. See "Boris Red Online Help: The Intelligent Assistant" for information.

Keyboard Shortcuts

The Keyboard Shortcuts Appendix was not included in the printed version of the Red User Guide. Instead this information appears in a Keyboard Shortcuts pdf on the Red CD.

New Modifier Keys for Dial controls

When using the ***mouse*** on dial controls, you can now use the following modifiers:

- Press the Shift key to round the marks on the dial controls to the nearest 45 degrees.
- Press Control (Windows) or Command (Macintosh) to round the marks on the dial controls to the nearest 10 degrees.
- Press Shift-Control (Windows) or Shift-Command (Macintosh) to round the marks on the dial controls to the nearest 5 degrees.
- Press Shift-Control (Windows) or Shift-Command (Macintosh) and use the mouse wheel to round the marks on the dial controls to the nearest 45 degrees.

When tracking with a ***mouse wheel*** on dial controls, you can use the following modifiers:

- Use the mouse wheel with no modifier keys to move the dial controls in 1 degree increments.
- Press the Shift key and use the mouse wheel to round the marks on the dial controls to the nearest 10 degrees.
- Press Control (Windows) or Command (Macintosh) and use the mouse wheel to round the marks on the dial controls to the nearest .1 degrees.

Fixed Bugs in Boris Red 3.01 GL since Red 2.x

Red 3.01 GL fixes many bugs from 2.x versions of Red. Fixed bugs include the following:

- **Windows only:** When resuming a paused render in the Render Queue, the render now resumes where you stopped it rather than at the beginning.
- **Windows only:** If you delete a composition from the Render Queue then choose Undo and render the composition, you no longer receive a "Failed to render because of errors" error message.
- Undoing a keyframe move on a spline object track no longer removes the keyframe.
- When you create two Spline Objects and use the Hollow Arrow tool to lasso them, you can now use the ***Combine Contours*** feature (Tools > Path > Combine Contours).
- Top Down text punctuation is now placed correctly for Japanese text.
- Copying, pasting and importing Kanji text from other applications no longer exhibits problems.
- **Mac OS X only-** If you import an .rtf format that was created in the OS X application **Text Edit**, the formatting now appears correctly in the Text window.
- The Combine Contours command now allows you to combine multiple shapes at once.

Known Limitations in Red 3.01 GL

Red 3.01 GL includes the following known limitations.

General Limitations

- The Motion Blur button is a global preference. That means that, when you render, all settings respect the last setting of this checkbox in the UI. This is not a bug, but can be confusing when you render multiple effects in the Render Queue.
- If you tumble an object that has an image bump map (such as a movie or still image file), you may see a moire pattern as it tumbles.
- **Windows only:** If you reopen a saved setting where you previously changed the color of a border or gradient using the eyedropper, in some instances the color has reverted back to its original color.
- When you save a style to the Materials tab in the Style Palette, it does not correctly save the Source type that was used in the Bump Map tab.
- The **V** key in the new Color Preview feature does not work to commit to a color. You can use the **C** key to dynamically preview colors, but you cannot use the **V** key to commit to them. Click the mouse instead.
- When you open settings created in previous versions of Red, Red 3.01 GL ignores controls that were initially enabled in the Lights 2 and 3 tabs.
- If you import files into Red that were created in Adobe Illustrator version 9, they display as transparent. Save the file in Illustrator version 8 instead.
- When you search for a missing media file using the **Search button** in the Media Files window, it may not find files that were moved to another local drive. Manually browse to the new location of the file and press the **Replace button**.
- Tracks containing PSD files that have been converted to containers do not correctly update if you modify them (for example in Photoshop) and then use the Reload Files command.
- The PixelChooser mask renders into final rendered effects. It should only display in the Composition window.
- Files exported to Flash from Red cannot be used in Macromedia Flash authoring applications such as Flash MX.
- If you use the Keyframe Time field in the timeline to move keyframes, all keyframes that a moving keyframe passes are merged to it. Instead, move keyframes past one another by dragging the mouse.
- If a track in the timeline has media nested inside one or more of its tracks, moving the parent track up or down in the timeline causes the track to open and display all of its subtracks., including opening all of the nested tracks.
- Photoshop (.psd) files with adjustment layers display incorrectly in Red if you convert their track to a container. Turn off any adjustment layers in Photoshop before importing .psd files if you plan on converting them to containers.

- If you work in a HD project or with a project size more than 1000 pixels wide, the image on the bottom right of the Composite window displays as gray when you zoom to 1600%.
- Resuming a partial render of an exported QuickTime file may have some undesirable side-effects. In particular, video compressed with codecs that use frame-differencing and data-rate-limiting (such as Sorenson or Cinepak) may exhibit some of the following behavior during playback.

  Some frames following the resume point may be corrupted. The data rate may be slightly larger than expected. Also, if the file includes an audio track, a slight blip may be heard at the resume point. This may occur with any codec.
- If you use Frame-Differenced movies in Boris Red (including movies compressed with Apple's QuickTime Animation codec, and some movies compressed with Sorenson), you will see reduced performance within Red. The use of Frame-Differenced movies is not recommended within Red.
- When field media is exported or previewed as frames, only the first field is used.
- If you are using a still image file as media in a track, then make changes to the source still image file and save the file using the same name, attempting to import the updated still image file into the original track will not change the media as expected. To refresh the media so the updated still image displays, use the **Reload Files command**.
- Using non-square pixel aspect ratios (i.e. 720x480) can distort the EPS media type when used with the 3D Plane Shape. Use the 3D Line Art shape instead.
- Any effect that uses a filter involving edge detection (for example, RGB Edges) should be rendered with the **Better Quality Field Rendering checkbox** selected. Otherwise, the rendered effect will jitter.
- In the 2D Particles filters, increasing the particle size scale can cause some custom shapes to truncate. You can avoid this by looking at the initial, unscattered particle grid. If some particles are cut off by the frame when you increase their size, then they will remain cut off throughout the duration of the effect. To avoid this, adjust the size parameters so that no particles are initially cut off.
- The first rendered frame of effects using the 2D Particles Advanced filter will display particles, although you will not see particles in the first frame of a preview.
- When an image is full size in the Composite window, you must deselect the Shape control in the Composite window's Controls menu to directly manipulate an object's Mask or Crop controls. .
- **Windows only:** Balance and Volume controls have no effect on audio tracks containing AVI files or MP3 files.
- **Windows only:** Boris RED exports Flash.swf files that are compliant with the Flash 5 architecture. If you are using QuickTime to preview your exported.swf files, your QuickTime version must support the Flash 5 format. Older versions of QuickTime display the background as a solid color.
- **Final Cut Pro version 3.0 Users only:** FCP 3 users running Red as a plug-in with FireWire for Red's Preview to Monitor feature, must disconnect before clicking the **Apply button** or FCP will crash. To disconnect, choose Preview > Disconnect External Monitor.

- **Avid XpressDV and Speed~Razor only:** The Tool window can be forced into the background if you open it then click a window it is floating over.
- **Avid AVX 1.5 hosts only:** High quality two-field host media may look field doubled on the external monitor within the Red UI. This is because the Avid AVX 1.5 architecture passes us one field, and we double it. Set ***Host Field Order*** (in the Import tab in the Preferences window) to **None** to fix this. This setting only affects exports of host video using fields as frames.
- **Windows Avid Xpress Pro Only:** Due to a problem on Avid's side, you will crash when exporting a QT movie if you choose Avid's MPEG 2 codec.
- **iFinish only:** Intermittently, iFinish's Media 100 codec is not available within Red's QuickTime Export options list. Quitting and relaunching iFinish may fix this.
- **Premiere 6 only:** When exporting host media through RED, use Fields > None to export movies, rather than choosing upper or lower fields.
- **Pinnacle systems only:** Although choices appear for accessing video tracks 1 - 32, you can only successfully access tracks 1 and 2. Tracks higher than two display as black. This is a limitation of the Pinnacle plug-in architecture.
- **Sony Vegas only:** If a Boris effect is prerendered in the Vegas timeline, future changes to that effect in Boris will be saved but do not appear in the Vegas Preview window until you remove the prerender in Vegas (Tools > Clean up Prerendered Video).
- **Sony Vegas only:** Vegas only previews a single frame of video in Boris Red. The preview frame is taken from the current position of the Vegas cursor. To preview your effect with updating source media, exit Red and preview the effect in the Vegas Video timeline.
- **Sony Vegas only:** Motion Blur does not display in a rendered effect if you apply Red directly to a clip in Vegas. Instead, import the media directly into the Red timeline and you will see motion blur after you render your effect.
- **Ulead only:** When using Red 3.01 as a transition in Ulead, the image quality for host media in the Boris Composite window is very poor. This is because Ulead does not pass a full size image. However, this does not affect rendering. The effect renders in high quality.
- **Ulead only:** When Using Red 3.01 within Ulead with the Matrox Parhelia board, you may run into crashing problems. We do not recommend using the Matrox Parhelia board with BRed 3.01.
- **Ulead only:** Due to a problem on Ulead's side, certain Ulead systems may display jagged edges or reversed fields in rendered Boris effects. If your system shows this problem, run the **Ulead Field Swap utility** found on the top level of the Boris CD in the Ulead Field Change folder. This utility is also available for download on the Boris web site. If you have questions about running this utility or whether your system exhibits this problem, read the Ulead.txt document included with the utility or call Boris technical support specialists at support@borisfx.com.

Limitations with OpenGL

- Final Cut Pro 4.xusers must install Macintosh OX 10.3 installed in order to support Red's OpenGL feature.
- Extruded shapes inside Z-Space Containers will display in the Composite window in OpenGL Draft mode even when the extruded shape is grayed out in the timeline.

Limitations with Keyboard Shortcuts

- **Windows Only:** The shortcut for changing color channels to RGB is labelled incorrectly. The Preview menu displays Color Channel as (ALT+-), but the actual shortcut is (ALT+`). You can assign new shortcuts in the Shortcuts window. See Volume I in the User Guide for more information on creating shortcuts.
- **Windows Only:** The shortcut for hiding marks is listed as (CTRL+ALT+'), however that shortcut does not work. Use the menu choice in the Preview menu, or create your own shortcut in the Keyboard Shortcuts window instead. You can assign new shortcuts in the Shortcuts window. See Volume I in the User Guide for more information on creating shortcuts.
- **Windows Only:** After creating new keyboard shortcuts, certain items in the Windows menu may show duplicate keyboard shortcuts (for example, the Filter Palette and Media Files window display the same keyboard shortcut). You can assign new shortcuts in the Shortcuts window. See Volume I in the User Guide for more information on creating shortcuts.

Limitations with the Spline Object Media Type

- **Windows Only:** There are instances when you may want to include tracks that use the 3D Plane shape in a 3D Container that uses the 3D Model Renderer. This allows you to apply 3D parameters such as Materials, Textures and Bump Maps to two dimensional shapes. When you use one of these two dimensional shapes in a 3D Model container, the track is called a 3D Primitive. However, render problems can occur when you enable a Bump Map for a Spline Object or Spline Primitive track in a 3D Model Container. Areas of the Bump Map can appear as a solid dark color or with dark bands if the track is tumbled or spun in 3D space. The workaround for this problem is to extrude the Spline track by assigning it the 3D Extrusion shape. Then set the **Extrusion** and **Bevel** amounts to zero to maintain the Flat look.
- If you select a group of splines in the Composite window and adjust one of the Path track's control parameters, the changes are not applied to any of the splines. The Path controls can only adjust one spline at a time.
- The ***Reverse Keyframes*** command (Track > Reverse Keyframes) does not work in Spline effects.
- If you apply a spline style from the Style Palette to a spline primitive shape, the shape resets back to the default shape values.

Limitations with Text Features

- When the Text window is open, changes made in the Controls window (such as Margin, Wrap, or Font) will not update to the Composite window.
- The Date format ***Day/Month/Year*** in the Date / Time generator displays a comma at the end if you have suppressed the time display.
- When Top-Down text is selected, the **Text Wrap menu** setting is ignored.
- **Tracking** controls the global horizontal spacing of the characters in an effect. Tracking behaves differently depending on whether the text was created with the Text tool or in the Text window. When you create text with the Text tool, the tracking honors the justification that is set in the Transform tab. When you create text in the Text window, the tracking is applied with center justification. If you want to track to the right or left using text that was created in the Text window, select the text with the Text tool and move it slightly. Then set the justification in the Transform tab. The Tracking now uses the justification. For more information, see "Working with the Transform Tab" in Volume 1 of the Red User Guide.
- When using Kanji text, the underline option overlaps certain characters, depending on their size.
- Importing RTF documents using the ***Insert Text*** feature in the timeline's contextual menu will cause all tab delimited text to appear on the first line in Red, rather than in multiple lines. You will need to manually insert line breaks.
- Text on a Path moving from right to left will display upside down. To correct this, manually reverse the path, or click the **Reverse Path checkbox** in the Path tab.
- Text effect settings created in previous versions of Red may appear to have different leading and spacing values when opened in Red 3GL.
- If you Flip an image vertically and then render it through the host, the rendered video appears jittery. Enable the **Better Quality Field Rendering checkbox** to render correctly.
- Text Radial edge widths over 18 points appear strange in characters like "o" and others with centers.

Limitations with Chart Features

- Accented letters such as é are not passed from the Chart Editor to the Chart Container correctly. Therefore, a Chart Legend or Grid label that uses accented characters must be entered directly into the text track, using the Text tool or Text window. If this is necessary, it must be done as a final step when building the chart. This is because editing the chart data or enabling / disabling the Legend or Grid updates this text using Chart Editor text; as a result, the accented characters will be lost.
- When both the **Reveal** and **Remove checkboxes** are enabled in the Animation tab, Position X no longer animates when you work with extruded Bar and Pie Charts.
- Removing an extruded Bar Chart by selecting the **Reveal Shape checkbox** in the Animation tab does not work correctly. Instead of animating the height of the bars sequentially, they are simply removed individually. In addition, when this checkbox is selected, the Overlap Time parameter is not respected.

- For the most reliable results, the **Animate button** should not be in static mode. For more information, see Chapter 1 in Volume I of the Red User Guide.
- On certain systems, extruded pie charts pieces may incorrectly display their corners. Reduce the Bevel to 0 to fix this.
- If you have long names for the X axis (defaults: South, East, West, and North), and you are animating the chart (if you have animation turned on) the names will not line up with the actual chart.
- Selecting the **Apply Current Spline Style checkbox** can create unintended changes if the setting is modified after another spline style is selected. For example, you create a static Line chart setting with the **Apply Current Spline Style checkbox** selected. You apply another spline style from the Style Palette to a different track. If you then animate the chart, the chart will update with the latest spline style, rather than the style originally saved with the effect. The only workaround necessary is to reapply the original spline style from the Style Palette.
- Depending on the scale you set for a Line Chart, you may see small nicks or indentations in the lines when you work in Full Resolution. Slightly increase or decrease the scale of the line chart to fix this.

Limitations with Filters

- If you apply a BCC Colorize filter as a standalone filter to the timeline, the gradient bar displays black instead of showing colors. This only happens when you apply it as a standalone filter, apply the filter to a track instead.
- **Windows Only:** Do not press the ***About Box*** for the Delirium DE Day for Night FX filter. You will crash Red.
- **Avid Xpress DV Only:** The final render of an Optical Flow effect that is applied to host media renders slightly jittery.
- When the default interpolation is set to Constant in the Preferences window, and a Motion Tracker filter is added to the timeline, resetting the default interpolation in the Preferences window will result in no keyframes being generated for the Motion Tracker when you move the tracker target/region until you exit and re-enter Red.
- The Fire filter renders with the fields reversed unless you render it with **Better Quality Field Rendering** enabled.
- In the Fire filter, when using text as a Map layer, the size of the text is ignored and will frequently display garbage. Map text to a Shape, then nest the shape layer inside the Fire filter to correct this problem.
- Some filters create effects that evolve over time based on their parameter settings. The output of these filters (for example Velocity Remap, Particle System, Comet) depends on the parameter values for the entire effect; changing a parameter value on any frame changes the output for all subsequent frames. If you see a jump in the animation after changing a parameter, the jump is probably because Red did not invalidate frames that were affected by the change. You can fix this by choosing Edit > Purge Frame Cache, and previewing again. Your rendered output does not use the cached frames, so even if you forget to purge the frame cache, your final render appears correctly.

- Time filters do not work with host video when rendering in many hosts. They work with Movie media when rendering in the host. For more information on this limitation, see "Important Note on Creating Time Effects within Boris Red" on page 23.
- Time filters always use the first field of fielded media when frame rendering or previewing.
- Due to improvements made to many filters, some filters (for example Burnt Film) do not look exactly as they did in Red 2.5.
- The Motion Tracker Filter's **Analyze button** won't analyze the total length of the timeline if a movie file's length is shorter than the duration of the effect and the movie file is set to Loop.

Limitations with BCC Grain Filters

- The grain filter presets do not store the grain sample, only the filter settings. If you load a Match Grain preset and want to use a stored grain signature, you have to load that as well. If you load a DeGrain preset with the **Lock Sample checkbox** enabled, Red will not acquire the sample.
- If you select a preset in the Match Grain filter, the preset name does not appear in the control.
- The BCC DeGrain and Match Grain filters can only be used when Red's Composite window is set to Full Resolution. If you are not in Full Resolution, an error message warns you to set the Composite window to Full resolution. If you do not set the Composite window to Full Resolution, a red "X" will display in the sample box.

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Contacting Technical Support

For technical support, contact Boris Red technical support specialists:

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