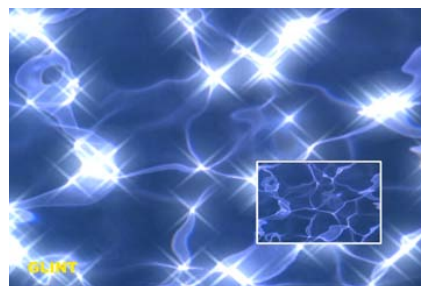
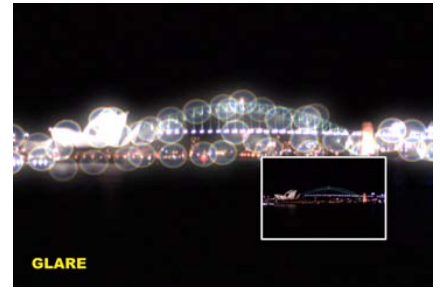


Boris Continuum Complete Reviewer's Guide



Introduction

Boris Continuum Complete 3 (BCC) is a comprehensive set of more than 150 powerful yet easy-to-use filters for Adobe® After Effects®, Adobe® Premiere Pro®, Apple® Final Cut Pro® and Boris Red® systems. BCC 3 offers fully native filters and transitions that you apply and animate in the host timeline. The wide range of effects deliver everything from basic everyday utility and convenience, to extraordinarily eye-catching special effects.

Support for Discreet® Combustion®, eyeon® Software Digital Fusion®, Quantel® generationQ™, and Media 100® 844/X® will be available in an upcoming release. In addition, a separate release supporting the Discreet Sparks architecture is scheduled for Q3 2004. The Continuum Complete plug-ins support both Windows and Mac OS X systems.



Continuum 3 is tightly integrated with the host systems, offering powerful new capabilities in the native effects interface. Continuum 3 facilitates the most powerful, flexible effects features offered inside of the host systems. These controls include the ability to animate and mix apply modes in a single layer, advanced animation tools, and unique PixelChooser controls for sophisticated channel or region-based mattes.

Continuum Complete is designed to streamline workflow for editors and compositors with over 150 filters including advanced keying, matting, and motion tracking. A set of fully native filters and transitions are applied and animated in the host timeline and native effects interface. For example, in After Effect®, the Boris Continuum Complete filters automatically appear in the Effect menu with the other After Effects filters. To apply a Boris filter, simply choose the filter from the appropriate BCC filter category in the Effect menu and apply it as you would any After Effects filter. Final Cut Pro users have the option to apply the effects as filters, transitions or real-time static generators. The integration has been customized for each host to take advantage of the native capabilities.

Continuum Complete 3 Feature Highlights

Boris Continuum Complete is among the most extensive filter sets ever created for nonlinear editing systems. Dozens of features never before available in the native interface dramatically expand the capabilities of the host systems.

- **Integrated Motion Tracking** This feature is built into a number of filters, greatly reducing the work of repositioning points on a moving image. A specialized Witness Protection filter can be used to obscure or highlight a specified target area of a clip. Motion tracking allows Position parameters to follow the movement of an object in the video image. For example, track a logo on a t-shirt and use a blur filter to obscure it.

In the following example, the motion tracking is applied to the light source of the Rays Ring filter in a Final Cut Pro project.



- **Effects Presets** While the Continuum 3 filters are useful in their default configurations, their default settings only suggest of their potential. Hundreds of included presets go much further, offering a wide range of easily customized effects within individual filters. Because the controls in Continuum 3 work directly in the native effects interface, the learning curve is minimal. Users can create their own presets for the greatest possible efficiency and ease. In addition, Grain presets, PixelChooser presets, and gradient presets can also be saved separately to easily move settings between filters. You can also share filter presets with BCC AVX filters from Avid systems for integrated workflow.
- **Keying** Continuum 3 offers more than twenty exceptionally robust keying and matte filters, including a powerful Chroma Keyer and a Wire Remover with built-in motion tracking. All the Matte & Key filters work very well with DV footage.
- **Particle Effects** 2D and 3D particle effects create dynamic transitions or graphic elements. Continuum 3 also features a sophisticated 3D particle system with animated custom particle shapes, integrated cameras, and full interactivity with alpha channels, frame edges, and other particles.
- **Open GL-Accelerated Lighting Effects** Fast Open GL-based generators provide lens flares, glints, glares and glitter effects.



Unfiltered Image



Filtered image with Continuum Glitter

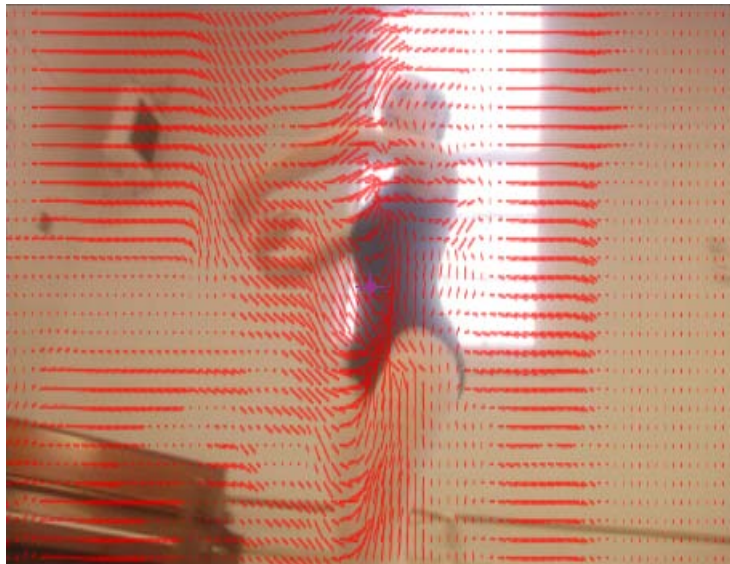


Unfiltered Image

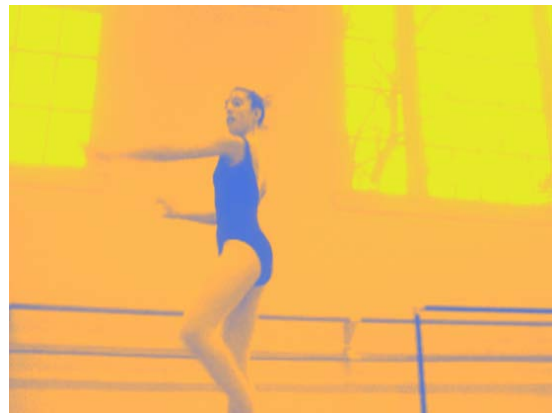


Filtered image with Continuum Lens Flare

- **Time-Based Effects** Nine time filters provide a wide variety of effects, including the ability to create smoothly ramping speed changes (Velocity Remap), to blur frames across time (Temporal Blur), and to create displacement maps in time rather than in space (Time Displacement). The new Optical Flow technology uses motion vectors to analyze an image and create new intermediate frames providing very smooth, keyframable, slow motion effects. The same technology is used to create realistic motion blur effects.



- **Advanced Visual Effects** Even the most traditional editing tasks sometimes call for extreme effects, and Continuum 3 offers dynamic effects powerful enough for any occasion, including Glow, Lens Flare, Emboss, and Cartooner. The following example show an unfiltered clip and the same clip with a Colorize Glow filter applied.



- **True Layer Compositing** In addition to providing 27 apply modes directly, Continuum 3 offers the unique ability to animate and combine apply modes, as well as the ability to adjust brightness and contrast in a single step. BCC can blend video layers in a variety of desirable ways. Take advantage of advanced keying and matte controls. Blend layers by combining and animating apply modes or filter images selectively using the integrated PixelChooser masking. Users can quickly create sophisticated multi-layer composites with robust tools for keying, lighting, color and even temporal effects.

In the following example, the child is simultaneously keyed over a second background, composited with the background by an Apply Mode, and used as the source of a Light Rays effect.



- **The PixelChooser™** This unique Boris technology provides built-in masking and automatic matte generation tools for many of the filters found in Continuum 3. Going far beyond animated garbage masks, the PixelChooser also provides matte creation based on channel information such as luminance and alpha channels. The matte output from the PixelChooser can then be applied to other filters for exceptional control. After Effects users can incorporate their custom masks into the PixelChooser.

- **New Auto-Animating Wipe Transitions** Continuum 3 offers a suite of wipes which provide a variety of unique transitions. You can apply and customize the wipes in no more than a few clicks (no keyframing required). Advanced features include animating patterns and noise that modify the shape of the wipe edge as well as multiple borders with options for softness and bias control. A unique Influence feature uses the luma or chroma values of a shot to influence the shape of the wipe edge, resulting in unique looks with a natural feel.



- **3D DVE** Continuum 3 offers a number of filters that create a three-dimensional compositing environment, including 3D tumble and spin, animated lights and perspective camera. The Z Space filters allow objects to intersect, interact with common light and drop shadows on each other.
- **Nature Effects** Auto-animating generators include Clouds, Fire, Rain, Snow, Sparks, and Stars. All the filters include alpha channel support, and include the ability to interact with other layers.
- **Lighting Filters** True 3D modeled spotlights include controls over the light's color and apply mode, as well as the ability to only shine in the alpha channel for sophisticated compositing effects. A number of radial light simulators have been added to simulate back light as well as streaks and shimmer.
- **Displacement Maps** The Displacement Map filter uses the luminance or color information from an alternate video or still image track (the Map track) to displace the pixels in the source image horizontally and vertically. Additional displacement filters animate this effect from the center of the frame outward (Polar Displacement), and separately in the R, G, and B channels (Vector Displacement).

- Film Look** A suite of filters is designed to make video look like film. Deinterlace, Film Process, Film Grain, Film Damage, Match Grain – Film effects let you give video the appearance of having been shot on film. Emulate popular film stocks or integrate different types of media in a single project. For example, match computer-generated animations with archival film stock. Deinterlace converts to frame-based footage while maintaining the highest image quality and resolution. This filter also includes options for simulating telecine 24 fps material with pulldown. Film Process offers precise controls to simulate the tinting and gamma of film stocks. Film Grain and Film Damage can add grain, flicker, hair, and scratches. Match Grain samples the grain from one source and applies a similar grain to the filter clip.



- Texture Generators** Procedural texture generators create realistic materials that can be applied to titles, used to create backgrounds or other graphic elements. These include Granite, Steel Plate, Veined Marble, Reptilian, and Wood Grain among many others. A separate Caustics filter can be used to create reflections of light in a water pool.



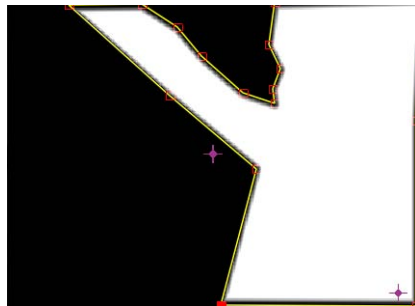
- Real Time Static Effects** BCC 3.0 contains thirteen filters that can be used as static backgrounds in Final Cut Pro. When you apply these filters, they do not animate, but they will play in real time. Occasionally these filters must be rendered in order to play in real time, depending on the complexity of the sequence. This collection of real-time filters is a subset of the existing filters and is easily accessed from FCP's Generator menu in the lower-right corner of the Viewer.

Boris Continuum Complete Frequently Asked Questions

How does Boris Continuum Complete differ from other filter sets?

Part of that answer may be found in the wide range of filters that BCC offers. More important are some of the larger approaches taken in these filters. Chief among these is the *PixelChooser*, which merits its own chapter in the Boris Continuum Complete User Guide (Chapter 10). We highly recommend reading this chapter for a full overview of this powerful tool. In addition to being offered as a standalone filter, the PixelChooser is a component in most Continuum 3 filters.

The PixelChooser is a built-in masking and matte creation tool. Region-based selections function much like traditional garbage masks, limiting the action of a filter to one part of the image. Users can choose from simple animateable shapes such as a rectangle, oval, or linear gradient. After Effect users can also use custom masks to define a masked region, then combine these masks with channel-based masks for the most precise control.



Custom After Effects mask



Filtered image

You can use a region-based matte as a garbage matte, then combine it with a channel-based matte for precise control. Channel-based mattes limit the actions of a filter to specific channels (including luminance, alpha, and HSL Difference). Both region-based masks and channel-based mattes may be combined with a number of other nuances described in the Continuum 3 documentation, for an unprecedented degree of control over filters.



Inside Rectangle Region Mask



Red Channel Mask



Combined Region and Channel Mask

BCC also offers an unprecedented degree of compositing power. The compositor's primary task is to manage the transparency of layers. Continuum 3 offers a number of unique approaches, including the ability to set the order that layers are mixed from within the filter, and to quickly adjust the contrast and brightness of the composited layers. Continuum 3 can also mix and animate apply modes in a single layer through the "Apply Mix From" setting. This feature can soften the affect of an apply mode, combine apply modes, or animate to transition from one apply mode to another.

Not only does this approach offer additional compositing control, it reduces rendering time by not requiring additional layers to provide the transition between apply modes. No other compositing application can achieve this kind of control over the compositing process inside nonlinear editing systems.

Many Continuum 3 filters also combine related tasks in a single filter. While the output is similar to what is possible otherwise, Continuum 3 creates effects faster, and in some cases, provides faster rendering. For example, the PixelChooser filter allows users to blur an image, extract a key, blur the matte and then choke it in one filter.

How does Boris Continuum Complete compare to GenArts Sapphire?

GenArts Sapphire is a set of high-quality image processing filters for nonlinear editing systems, as well as dedicated compositing systems. Many of Sapphire's image processing filters are similar to those found in Continuum 3. For a detailed comparison document, visit www.borisfx.com.

Sapphire's approach is to create variations of effects as individual filters (WarpWaves, WarpWaves2). Rather than create separate filters for each effect, Continuum 3 creates variations through hundreds of customizable presets.

Continuum 3 offers very strong keying and image retouching capabilities – an area of post production not addressed by the Sapphire filters.

How does Boris Continuum Complete interface with other Boris plug-in applications?

While Boris Continuum Complete is a solution for Adobe After Effects, Adobe Premiere Pro, Apple Final Cut Pro and Boris Red systems, Boris Continuum Complete AVX is a set of filters using the native effects creation interfaces for Avid® nonlinear editing systems. Many of the filters in Continuum 3 and Continuum 3 AVX are also found in Boris products such as FX, Graffiti and Red. Instead of using the custom interface shared by those products, the filters in Continuum 3 use the native host effects interface.

Boris Red, Boris FX and Boris Graffiti are plug-ins primarily designed for nonlinear editing applications, and feature a shared, custom interface. The custom interface allows many effects that could not be provided using the NLE's native interface, such as EPS import and extrusion, vector paint and 3D text and objects. The custom interface also provides standalone effects creation, outside of a host application.

By working in a native interface, Continuum 3 minimizes the learning curve for those already familiar with their host systems. The custom interface of Boris Red, on the other hand, provides many features not otherwise available. As a result, many users will find a combination of Boris Red and Continuum 3 to be especially powerful for providing the widest possible range of effects creation. The two products are available for a discounted price as the Boris Motion Graphics Pack.

How much does Boris charge for support?

One year of free support is included with every purchase, even when the purchase is an upgrade. The fact is that upgrades are sometimes the only way to solve problems with older software. So in practice, Boris customers receive free support for the life of the product. Support is available by telephone and via email. In addition, many Boris employees voluntarily frequent email lists and user forums, handling many support issues proactively.

What's the difference between Red and Continuum Complete?

Boris Red uses a custom plug-in interface. Continuum Complete is a native filter set used like any existing native filter sets. Both approaches offer advantages. A native filter set offers a faster learning curve. A custom plug-in interface can create effects not possible using the native tools. For example, Red users can easily create type-on and write-on text effects or extrude EPS files and apply bump maps.

Editors who composite titles and graphical elements external to their systems should be encouraged to investigate the Motion Graphics Pack to save both time and even more money.

What's the difference between Continuum Complete and Continuum Complete AVX?

As of version 3.0, each package will contain almost identical features. With the exception of only a few filters, only the Continuum host support will differ. Each version offers some unique features based on the host architecture. For example, Avid users can save their effects to a bin. After Effects users can incorporate AE masks into their filters. Final Cut Pro users can apply real-time static generators. Each version is customized to provide the best integration with the host application.

New Integration Features

The following new integration features have been added to BCC version 3.0. See Chapter 1 in the Boris Continuum Complete User Guide PDF for more details on these features.

Working with the New Motion Tracker Parameter Group

The Motion Tracker parameter group allows you to track the motion of an object in a media file. You can then use the motion path data to control another aspect of the effect. The parameters that can be affected depend upon the filter. For example, apply a Blur filter to a clip and use the Motion Tracker parameters to track a logo on a t-shirt. Use the PixelChooser parameters to apply the Blur to obscure the logo.

The Motion Tracker parameter group is included in many filters that include the PixelChooser parameter group. This allows you to apply the filter to an area using a shape choice in the PC Region parameter group's Shape menu.

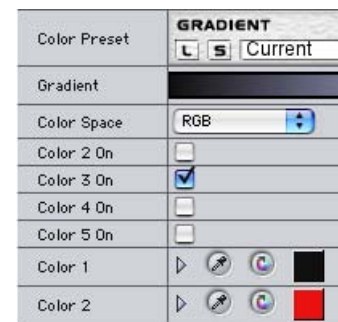
The Wire Remover filter includes two Motion Tracker parameter groups so that you can track both ends of the wire that you want to remove. The Witness Protection filter allows you to apply a mosaic, blur, tint or brightness/contrast effect to the specified area.

The Light Zoom, Rays filters and Lens Flare filters allow you to track the Light Source, with one exception. In the case of the Rays_Radiant Spotlight, the Spotlight Target is tracked. The Twirl, Radial Blur, and Spiral Blur filters also include a center option. This allows you to track the center point of the effect.

Working with Color Presets

Just as you can load and save filter presets, the Color Preset banner allows you to load and save gradient presets in certain filters such as the BCC Colorize and BCC Light Zoom.

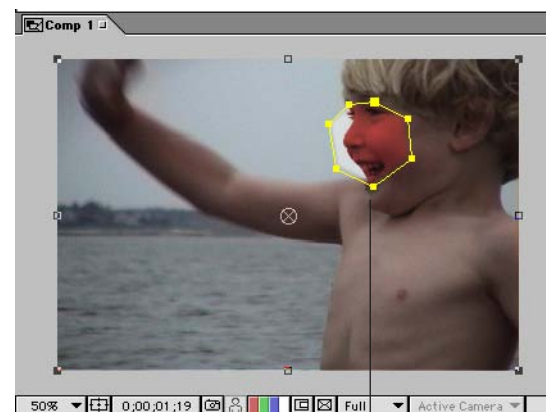
After you apply a BCC filter and adjust the gradient parameters, you can save the parameter settings and reload them later. Several premade presets are also included. Color presets are compatible with any filter that uses gradients.



Using After Effects Masks in the BCC 3.0 PixelChooser

BCC 3.0's PixelChooser allows you to select masks created in After Effects. This is useful for adding animated masks to your BCC filters.

Create a mask in After Effects and set the **Mask Mode** menu to **None** in the After Effects timeline. Apply a BCC filter containing the PixelChooser and set the **PixelChooser** menu in the filter to **On**. In the PixelChooser's Mask menu, choose the mask you created in After Effects. The region defined by the mask is used by the BCC filter's PixelChooser.



Mask created in After Effects

Working with the BCC Real-time Static Generators in Final Cut Pro

BCC 3.0 contains thirteen filters that can be used as static backgrounds. When you apply these filters, they do not animate, but they will play in real time. Occasionally these filters must be rendered in order to play in real time, depending on the complexity of the sequence.

Choose **BCC3 Generators** from the **Generator** menu in the lower-right corner of the Viewer, then choose the appropriate generator from the submenu. BCC includes the following Generators: **BCC Brick**, **BCC Cloth**, **BCC Fractal Noise**, **BCC Granite**, **BCC Mixed Colors**, **BCC Rays**, **BCC Reptilian**, **BCC Rock**, **BCC Steel Plate**, **BCC Veined Marble**, **BCC Weave**, **BCC Wood Grain**, and **BCC Wooden Planks**.



Generator menu

Working with OpenGL

BCC OpenGL hardware acceleration speeds rendering and previews for certain filters in the Lights category. OpenGL is a cross-platform standard that dramatically improves interactivity and rendering. "GL" stands for graphics library. "Open" refers to the ongoing, industry-wide contributions to its evolution. OpenGL is built into both the Windows and Macintosh operating systems as well as a wide variety of display cards.

Currently Boris Continuum Complete includes several filters that are OpenGL-dependent. These include the BCC Glare, BCC Glint, BCC Glitter, BCC Lens Flare and BCC Lens Flare Advanced filters. OpenGL is required to use these filters. See the Understanding OpenGL PDF on your Boris CD for any additions to this list.

New Apply PixelChooser Menu

If you are using the controls in the PixelChooser parameter group, the **Apply PixelChooser** menu now allows you to determine when the PixelChooser controls are applied to the image. This menu is included with a subset of the BCC filters.

- Choose *Post-Effect* for the PixelChooser to affect the image before the filter is applied.
- Choose *Pre-Effect* for the PixelChooser to affect the image after the filter is applied.
- Choose *Both* affects the image before and after the filter is applied.

Changes to Existing Filters

Many changes have been made to the existing BCC filter set.

Renamed Parameters

Multiple parameters have been renamed to prevent truncation and provide clarity. Some filters include new parameters.

Renamed Glow Filter

The Glow filter has been renamed Rough Glow. This filter uses a blur to create a glowing effect, highlighting the edges in the image. If you are creating a new effect, you should use the new BCC Glow filter. Glow finds the brighter parts of an image and then brightens the surrounding pixels to create a diffuse, glowing halo. Glow can also simulate overexposure of brightly lit objects. You can base the glow on the original image colors or a chosen channel. You can also create a gradient glow between two colors and to create multicolor effects with looping.

New Filters and Filter Categories

Boris Continuum Complete for includes more than 40 new filters and three new filter categories.

Additions to the Color & Blurs Category

Boris Continuum Complete 3.0 includes the following new Color & Blurs filters.

BCC Motion Blur

The BCC Motion Blur filter creates a realistic blur on the motion in an image, simulating the effect of shooting a moving object on film. The blur is based on the motion of the pixels in the image. For example, you could apply the Motion Blur filter to a clip of a speeding car and the car's would blur while the background would not. The blur is most pronounced when the object moves quickly. Motion blur is not visible in static areas.



BCC Pyramid Blur

The BCC Pyramid Blur filter emulates the look of shooting in soft focus or with lens diffusion. This filter allows you to blur the horizontal and vertical components of the image separately. The functionality is similar to the former BCC Blur filter. However, BCC Pyramid Blur uses a refined pyramid algorithm that speeds rendering. When you create new blur effects, you should use this filter.



BCC Radial Blur Filter

The BCC Radial Blur filter creates a blur around a specific point, simulating the affect of a zooming or rotating camera. The Amount option specifies the amount of blur, depending on the selection for Type. For a Spin blur, which applies blurs in circles around the center point, the Amount value indicates the degree of rotation. For a Zoom blur, which applies blur that radiates out from the center point, the Amount value specifies the degree of radial blurring.



BCC Safe Colors Filter

The BCC Safe Colors filter prevents clips from having saturation values that exceed the legal limits of broadcast standards. Use this filter to limit the values that are present in the image.



BCC Spiral Blur Filter

The BCC Spiral Blur filter creates a blur or smear that appears as though it is spiraling toward the center of the image.



BCC Z-Blur Filter

Use the BCC Z-Blur filter with a Z-map image to emulate a rack focus effect. Move the focal plane through the source image, using the Z-map to control the focus. Adjust the focal point, depth of field and blur parameters to finetune the area of the image to blur.

You can also set a channel from the image clip, then use that channel to control the z-blur effect. This type of effect is most noticeable in real life with a long focal lens, such as a 105mm or greater zoom lens.



Additions to the Effects Category

Boris Continuum Complete 3.0 includes the following new Effects filters.

BCC Colorize Glow Filter

The BCC Colorize Glow filter is similar to the Glow filter but it generates the glow from a single channel and then applies a gradient to the glow. The Colorized Glow can be composited with the original image or viewed by itself.



BCC DeGrain Filter

BCC DeGrain removes grain-sized noise from an image by analyzing a sample of the grain, then filtering out image noise that has similar frequency (spectrum) and amplitude.



BCC Deinterlace Filter

The BCC Deinterlace filter converts interlaced video clips into progressive-scan frames, such as footage shot on film. DeInterlace can render "simulated TeleCine" style by adding pulldown. This filter can also convert 29.97fps NTSC video into 24fps film-style frames.



BCC DeNoise Filter

The BCC DeNoise filter removes unwanted pixel noise from an image. DeNoise is especially useful when working with archival materials, as it lets you correct dark areas that show artifacts from film emulsion or video compression. You may also want to use the BCC DeNoise filter when resizing 4:3 images to 16:9 aspect ratio.

The BCC DeNoise filter distinguishes between moving areas and areas that are static. This allows the filter to selectively remove noise only from static areas. This preserves the full detail of areas that are in motion. DeNoise uses temporal and spacial smoothing to eliminate the artifacts, based on alternate frames in the video. Since the smoothing algorithm is based on a sequence of frames, it is difficult to show the effects of this filter in a still image.



BCC Dust and Scratches Filter

The BCC Dust and Scratches filter removes unwanted dust and scratches from an image. The PixelChooser is especially useful to specify which areas the filter should affect.



BCC Film Process Filter

Film Process allows you to give video footage the appearance of having been shot on film. This filter allows you to integrate different types of media in a single project. For example, match computer-generated animations with archival film stock. You may want to combine this filter with the BCC DeInterlace, BCC Film Grain, BCC Film Damage and BCC Match Grain filters for the most realistic results. In the following examples, the original image appears in the top left corner. The other images illustrate some of the different looks that can be achieved with this filter.



BCC Glow Filter

The Glow filter uses a blur to create a glowing effect, highlighting the edges in the chosen channel. The Glow finds the brighter parts of an image and then brightens those and surrounding pixels to create a diffuse, glowing halo. The Glow can also simulate overexposure of brightly lit objects. You can base the glow on either the original colors of the image or on a chosen channel. You can also use the Glow to create a gradient glow between two colors and to create multicolor effects with looping.



BCC Glow Alpha Edges Filter

The BCC Glow Alpha Edges filter applies a glow that adheres closely to the contours of the image clip's alpha channel or mask. This filter is designed for use with masks or images that have an alpha channel.



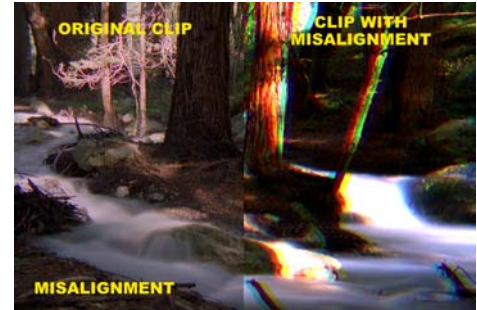
BCC Match Grain Filter

The Match Grain filter copies the grain signature from a source clip and applies it to a destination clip. This helps to create a more realistic composite. The grain that is sampled from the source clip can be stored and reused with the separate Grain Preset options. The example used for this filter is a synthesized sphere composited into a clip that has grain. BCC Match Grain was applied to the sphere to match the grain from the clip to make it appear that the sphere was part of the scene.



BCC Misalignment Filter

The Misalignment filter simulates the effect of misaligned RGB color channels.



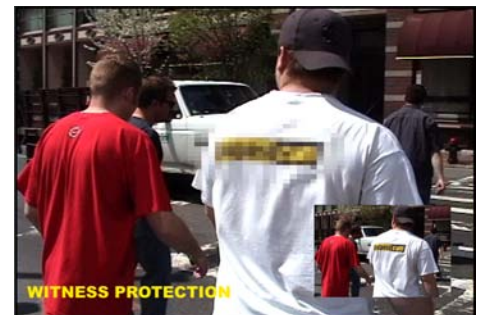
BCC MultiShadow Filter

BCC Multi Shadow is a versatile filter which you can use to composite up to three independent drop shadows over a source image.



BCC Witness Protection Filter

The Witness Protection filter allows you to track the motion of an object in a media file. You can then use the motion path data to control another aspect of the effect. For example, track a logo on a t-shirt and use a blur to obscure it. You can apply a mosaic, blur, tint or brightness/contrast effect to the specified area.

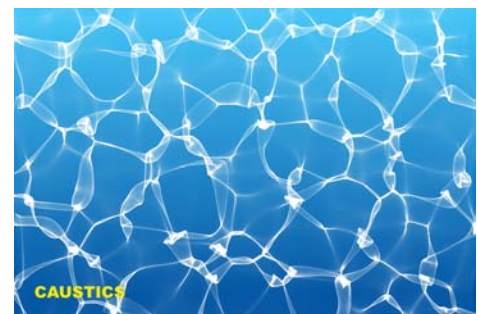


Additions to the Generators Category

Boris Continuum Complete 3.0 includes the following new Generators filters.

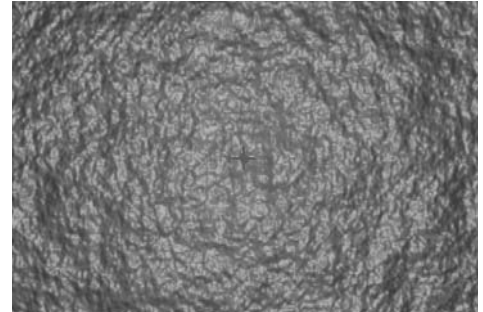
BCC Caustics Generator

The BCC Caustics filter can be used to simulate the effect of light refracting through a surface of water and projected onto a surface (like moving water ripple reflections on a pool bottom). You can use this filter to create many types of effects where rays emanate from a point and are reflected or refracted by a curved surface. For example, you could use this filter to generate moving plasma fields, smoky particle effects, waves in a pool, or animating geometric patterns.



BCC Rock Generator

Rock is a realistic rock generator. The rock can act as a filter on a clip or layer or you can generate an opaque rock surface.



Additions to the Keys & Matte Category

Boris Continuum Complete 3.0 includes the following new Keys & Matte filters.

BCC Glow Matte Filter

The BCC Glow Matte filter uses a blur with a gradient to create a glowing effect, then outputs an alpha channel instead of colors. This filter is useful for making semi-abstract mattes based on a glow of any channel in the original image.



BCC Light Wrap Filter

The BCC Light Wrap reflects a background image around the edges of a foreground image to form a border. This creates the illusion that light from the background image is reflected onto the foreground image. This creates a more convincing composite by making it appear as if the images were shot in the same environment.



BCC Wire Remover Filter

BCC Wire Remover removes wires and unwanted objects from still or moving images by either cloning or blending pixels together from surrounding areas. This filter has several uses. When working with blue or green screen shots, use this filter to remove wires or eliminate unwanted rigs or objects prior to keying. You can also use this filter to blend replacement pixels over video dropouts or film scratches.

The Wire Remover filter includes two motion tracker parameter groups. This allows you to track the wire if the ends move.



New Lights Category

Boris Continuum Complete 3.0 includes a new Lights category. Some existing filters such as BCC Spotlight were moved into this category. The Lights category also includes the following new filters.

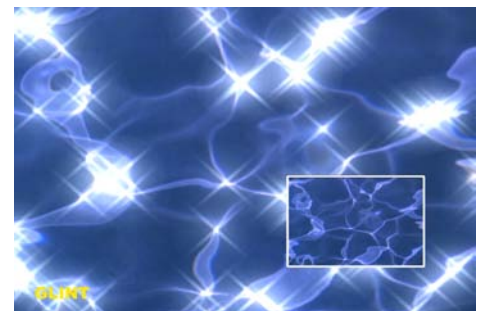
BCC Glare Filter

The Glare filter creates an effect producing a sharp reflection. A luminance map creates the glare based on bright areas in the image. The rendering of this filter is OpenGL accelerated.



BCC Glint Filter

The Glint filter creates a sparkle or ray burst effect. A luminance map creates the glints based on bright areas in the image. The rendering of this filter is OpenGL accelerated.



BCC Glitter Filter

The Glitter filter creates a glittering or sparkling light effect. A luminance map creates the glitter based on bright areas in the image. The rendering of this filter is OpenGL accelerated.



BCC Lens Flare and BCC Lens Flare Advanced

The BCC Lens Flare filter simulates a lens flare—that is, streaks and spots of light on film caused by light bouncing inside of a camera lens. Lens flare is typically produced when you point a camera too close to the sun. You can also use this filter to produce a range of other creative effects. The flare can be composited over the source image or you can generate a completely synthetic image.

Boris Continuum Complete includes both a BCC Lens Flare and BCC Lens Flare Advanced. The two filters are very similar except that BCC Lens Flare does not include all the parameters. BCC Lens Flare Advanced provides more options for controlling the effect; while BCC Lens Flare is streamlined for when you want to create a simple effect. The rendering of these filters is OpenGL accelerated.



New Rays Light Suite Filters

The Rays filters are a collection of lighting filters that offer similar functionality to produce varying lighting effects. The Rays filters produce light which spreads from a source point, and is generated from a selected channel in the source image.

The Rays filters are designed so that the most frequently used controls are at the top level. Other controls are in subgroups by category. All of these filters share a common set of controls; most also include some specialized controls.

Unlike most filters, you can load presets created in any Rays filter into another Rays filter. For example, you can create a preset in the BCC Rays Wedge filter and open it in the BCC Rays Streaky filter.

BCC Rays Cartoon Filter

The BCC Rays Cartoon filter creates the light out of the Cartoon edges of the filter. Using it is the same as using one of the other Rays filters with the Light From menu set to a Cartoon Edges choice.



BCC Rays Puffy Filter

The BCC Rays Puffy filter light which spreads from a source point creating a soft, "puffy" appearance. The light is generated from a chosen channel in the source image.



BCC Rays Radiant Edges Filter

The BCC Rays Radiant Edges filter creates light from the edges of the image.



BCC Rays Radiant Spotlight Filter

The BCC Rays Radiant Spotlight filter is a combination of a Light Ray Filter and a Spotlight. The spotlight can be used to matte either the light source or the rendered light.



BCC Rays Ring Filter

The BCC Rays Ring filter masks the light source with a ring. The resulting light is generated from a channel in the source image and spreads from a source point in all directions.



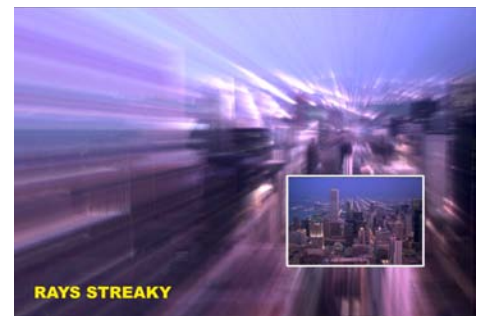
BCC Rays Ripply Filter

The BCC Rays Ripply filter combines a light rays effect with a rippled light effect. The resulting light is generated from selected channel in the source image and spreads from a source point in all directions.



BCC Rays Streaky Filter

The BCC Rays Streaky filter produces a light that contains streaks. the resulting light is generated from a chosen channel in the source image, and spreads from a source point in all directions.



BCC Rays Textured Filter

The BCC Rays Textured filter creates a textured light using a noise map pattern. The resulting light is generated from a selected channel in the source image, and spreads from a source point in all directions.



BCC Rays Wedge Filter

The BCC Rays Wedge filter mattes the light source with a wedge-shaped light. The resulting light is generated from a chosen channel in the source image, and spreads from a source point in all directions.



Additions to the Time Category

Boris Continuum Complete 3.0 includes the following new Time filter.

BCC Optical Flow Filter

The Optical Flow filter estimates the motion between two frames of video and renders an intermediate frame that interpolates the motion. The synthesized frame contains a mixture of the previous and next frames, each distorted by an amount determined by the optical flow estimation. With this filter, you can smoothly slow down or speed footage. Optical Flow generally produces smoother animations than a velocity remap filter.

Optical Flow synthesizes frames needed to complete the effect instead of blending adjacent frames as most retiming applications do. In essence, Optical Flow manufactures entire frames. Optical Flow analyzes the frames before and after the current frame to determine which pixels are moving. Then, only the moving pixels are synthesized, repositioned and composited into the new frame. The intervening information is created by warping the two frames, estimating where each individual pixel should be at every new in-between point.



New Wipe Transitions Category

Boris Continuum Complete 3.0 includes a new Wipe Transitions category which provides a collection of auto-animating wipes. While at their default values some of these wipes appear similar to basic SMPTE wipes, they include extensive parameters for you to customize. You can add wipe patterns and textures to the edges and assign an influence layer which pushes the wipe border in or out based on the value of pixels in a specified channel. These effects can also be applied as filters to create picture-in-picture effects.

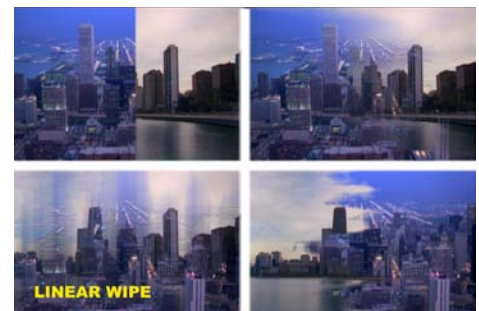
BCC Criss-Cross Wipe

The Criss-Cross Wipe combines two independent Multi-Stripe filters, to make wipes in a variety of patterns. At the default value, this wipe appears similar to a Grid wipe.



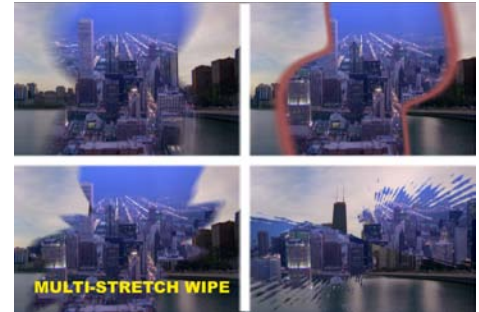
BCC Linear Wipe

BCC Linear Wipe is similar to a Horizontal wipe. However, it offers more parameters for you to customize. This filter is similar to a Rectangular Wipe filter, but wipes in a straight line.



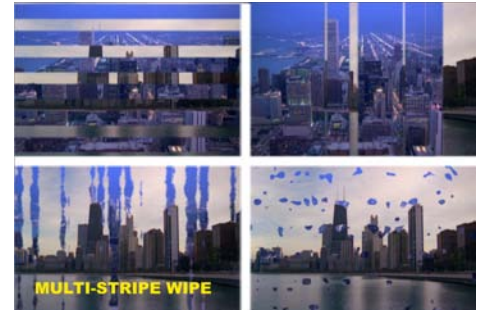
BCC Multi Stretch Wipe

The BCC Multi Stretch Wipe is a radial wipe with three additional stretch controls named Taffy Stretch.



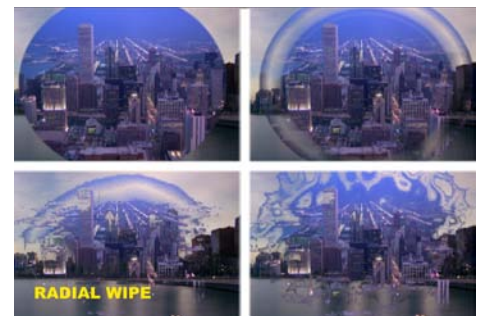
BCC Multi Stripe Wipe

The BCC Multi Stripe Wipe is similar to a Horizontal or Vertical Blinds wipe. It offers extensive controls to randomize the stripes parameters.



BCC Radial Wipe

BCC Radial Wipe produces a radial wipe transition, and contains many controls for unlimited creativity, including Influence controls and preset edge patterns. At the default value, this wipe is similar to a Circle wipe.



BCC Rectangular Wipe

This filter produces rectangular wipes, using most of the controls from the BCC Radial Wipe filter. At the default value, this wipe is similar to a Box wipe.



BCC Textured Wipe

The BCC Textured Wipe creates a non-geometric wipe using the Influence layer and the Texture settings. By default, the Influence is generated from the luminance of the outgoing clip when you apply the wipe as a transition and by the Filtered clip when you apply the wipe as a filter.



New Static Generators Category for Final Cut Pro

Boris Continuum Complete 3.0 includes a new Static Generators category which contains filters that you may want to use as a static background. When you apply these filters, they do not animate, but they will play in real time. You can also apply these filters to use clips in the timeline as textures. For example, apply BCC Emboss RT to a clip in the timeline; the first frame of the clip is used as the static texture.

Filters contained in this category include *BCC Brick*, *BCC Bump Map*, *BCC Caustics*, *BCC Cloth*, *BCC Clouds*, *BCC Emboss*, *BCC Fractal Noise*, *BCC Granite*, *BCC Mixed Colors*, *BCC Noise Map*, *BCC Reptilian*, *BCC Rock*, *BCC Steel Plate*, *BCC Veined Marble*, *BCC Weave*, *BCC Wood Grain* and *BCC Wooden Planks*.