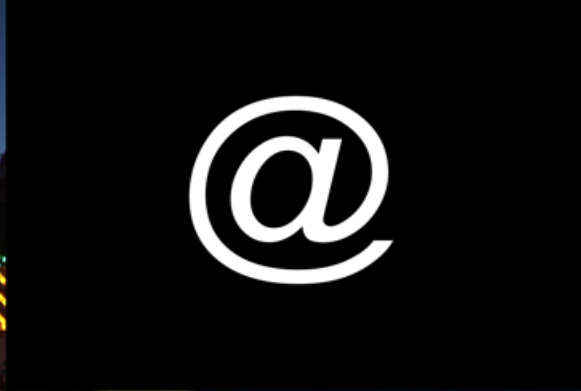


## BCC Lens Shape

The BCC Lens Shape filter (like the Lens Blur filter) emulates a lens blur defocus/rack-focus effect where out of focus highlights of an image clip take on the shape of the lens diaphragm, however, the Lens Shape filter takes an image input and uses this for the highlight shape. When a lens is used at its maximum aperture (fully open / set to the smallest f stop number) the out of focus highlights are typically in the shape of a circle, however, when the lens is stopped down (set to something other than the smallest f stop number) the blades inside the lens shape the out of focus highlights into multi-sided shapes. This filter includes a pop-up that can be used to match the different looks that can be achieved in the physical world based on the lens aperture setting. This pleasing optical result is referred to in photographic terms as Bokeh.

The BCC Lens Shape filter also includes a comprehensive depth of field (Z-Depth) option, whereby a separate image can be used to control the depth and position of the focus field.

Here are some image examples that demonstrate some of the different looks that can be achieved with this filter and beneath the images you will find a complete description of each parameter.





## Parameter descriptions:

**Compare Group:** This controls the output that is rendered by the filter.

**Compare Mode pop-up:** Controls what is displayed by the Compare Mode. The options are:

**Off:** Shows the output of the filter.

**Wipe:** Enables the user to interactively wipe the effect across the image. The left side of the wipe bar on the image output shows the unfiltered image, while the right side of the wipe bar shows the filtered result. When in Wipe mode, the corresponding Wipe slider becomes available.

**Side By Side:** The left side of the output shows half of the incoming image, and the right side shows the same half of the image as processed by the filter. When in Side-By-Side mode, the corresponding Slide and Right Offset sliders become available.

**Wipe/Slide:** Operates as a Wipe function when Wipe is selected in Compare Mode, and as a Slide function when Side-By-Side is selected in Compare Mode. When in Wipe mode, adjustments to this parameter moves the vertical wipe bar across the image; the region on the left of the wipe bar shows the original unfiltered image, while the region on the right shows the filtered result. When in Slide mode, adjustments to this parameter pans the

image in the viewer window, maintaining the spatial relationship in the viewer between the before and after images.

**Right Offset:** Provides a way to adjust the spatial relationship between the unfiltered original image and the filtered result in the viewer window. Adjustments to this parameter will offset the position of the filtered image in the viewer.

**Quality** pop-up - 3 way pop-up containing options that affect the edges of the generated highlights.

**Normal**

**Sharp**

**Sharper**

**Iris Scale** - Used to set the size of the highlight blur effect.

**Scale X** - Scales the highlight along the X axis only.

**Scale Y** - Scales the highlight along the Y axis only.

**Gamma** - Used to control the image highlight gamma.

**Show Iris Widget** checkbox - When checked, displays the on-screen interactive iris scale widget.

**Iris Shape** pop-up layer selector - Used to select a layer from the timeline, which is used as a basis for the iris shape.

**View Iris** checkbox - When checked, displays the iris shape on a black background.

**Iris Shape** group - Contains parameters to control the shape and look of the generated highlights.

**Channel** pop-up - Used to select the channel from the Iris Shape input that is used to define the iris shape.

**Luma** - Uses only the Luma values of the Iris Shape input.

**Alpha** - Uses only the Alpha channel values.

**RGB Independent** - Uses the combined RGB channel values of the Iris Shape input, ignoring the alpha channel values.

**Red** - Uses only the Red channel values.

**Green** - Uses only the Green channel values.

**Blue** - Uses only the Blue channel values.

**Iris Auto Center** - When enabled, centers the generated highlight shapes over the original highlights that they were generated from.

**Iris Offset X** - Used to offset the generated highlight shapes along the X axis.

**Iris Offset Y** - Used to offset the generated highlight shapes along the Y axis.

**Iris Threshold** - Used to set the breakpoint, or threshold that determines what is considered a highlight by the filter.

**Z Map** group - Contains parameters to enable and control Z-Depth compositing within the filter.

**Mode** pop-up - Used to set the mode of the Z-Map function

**Off** - Default, the Z-Map function is disabled

**On** - The Z-Map function is enabled

**View Focus Map** - Displays the current state of the depth of field image

**View Z Map** - Displays the Z-Map input image

**Mask Defocused Pixels** - Displays a ruby red mask which is overlaid on the main image showing the pixels that are out of focus

**Z Layer** - Used to select the layer that is used as the depth map image

**Z Channel** - Used to select a channel from layer that is used as the depth map image

**Luminance**

**Alpha**

**Red**

**Green**

**Blue**

**Lightness**

**PixelChooser**

**Smoothness** - Higher values produce a smoother blur result

**Focal Point** - Used to set the point along the Z axis which is in focus.

**Depth of Field** - Controls the depth of the focus field, or the amount of pixels that remain in focus

**Z Gamma** - Used to adjust the gamma levels of the Z Map input image

**Near Scale** - Use to increase the size of the blur applied to the pixels that are closest to the camera

**Far Scale** - Use to increase the size of the blur applied to the pixels that are farthest from the camera

**Highlights** group - Contains parameters to control the highlights that are generated by the filter.

**Boost/Sup Mode** pop-up - Used to determine the way the highlights are composited into the image.

**RGB Max** - Boosts the RGB values of the highlights.

**RGB Glow** - Boosts the RGB and Saturation values of the highlights.

**Luma Boost to White** - Boosts the Luminosity values and desaturates the highlights.

**Luma** - Boosts the Luminosity values of the highlights.

**Highlight Boost** - Used to set the intensity of the highlight boosting - higher values result in brighter highlights.

**Highlight Threshold** - Used to set the cut-off point for highlight boosting.

**Suppress Threshold** - Used to set the intensity of the shadow boosting - higher values result in darker shadows.

**Boost Soften** - A slope control that softens the highlight and shadow boosting effect.

**Post** group - Contains parameters for post processing the image.

**Apply Mode** pop-up - Contains 27 image apply modes for compositing the filtered result with the original image.

**Apply Mix** - Used to create a blend between the current apply mode and the Normal apply mode.

**Mix with Original** -Used to blend the filtered result with the unfiltered original image.

**Opaque Source** checkbox - disable to affect the image alpha channel.

**Motion Tracker** group - Contains the Motion Tracker control parameters.

**PixelChooser** pop-up - This pop-up is used to enable or disable the PixelChooser masking / matte system.

**PixelChooser** Group - contains the PixelChooser masking / matting parameter controls.