

# SOME CONCLUSIONS ABOUT PROSHOW PRODUCER MASKS

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## ASSUMPTIONS (Adapted from the Comprehensive Masking Tutorial)

- The MASKING LAYER Masks the Masked Layer.
- The viewer perspective for what layer is revealed or hidden is the *MASKED* layer.
- THE MASKING LAYER REVEALS or HIDES THE MASKED LAYER (depending on the color(s) used by the mask layer)!
  - Assuming the mask is an Grayscale mask
  - White Reveals, Black Conceals
    - Where the mask is WHITE the area masked is visible.
    - Where the mask is BLACK, the area masked is transparent.
- Any layer not already a mask or an adjustment layer may work as a mask
  - A layer of any color or group of colors
  - Any Graphic
  - Any Image
  - Any Video

## TRANSPARENCY MASK

- The masking layer color is irrelevant!
- Uses the Alpha Channel for Opacity Changes
- Non-Inverted Mask – The amount of the masked layer available for viewing is limited to the masking layer size.
  - Exception: A mask that is a gradient that varies from a color to transparency. In this case, the amount of the masked layer that's available for viewing will vary from opaque to transparent.
- Inverted Mask – The entire masked layer is visible and the masking layer is punching a hole through it.
  - Exception: A mask that is a gradient that varies from a color to transparency. In this case, the hole will vary from transparent to opaque.

## GRAYSCALE MASK

- Uses the Alpha Channel AND/OR Color for Opacity Changes
- Non-Inverted Mask.
  - The amount of the masked layer available for viewing is limited by the masking layer size.
  - The masked layers' opacity is determined by the color(s) used in the masking layer.
  - Exceptions:
    - A gradient that varies to transparency. If the gradient starts with black, the masked layer is hidden. When using any other color, the masked layer's opacity will vary from some level of opaque to transparent (when white is used) or to nearly transparent (when using virtually any other color but black)

- A gradient that varies from white to black. The visible portion of the masked layer varies from opaque to transparent. Note: Can act like its Transparency counterpart (i.e., inverted or not) that has a gradient mask that begins white and fades to transparent
- A black masking layer. Hides the masked layer.
- A white masking layer. The portion of the masked layer immediately beneath the masking layer is visible. Note: Can act like its Transparency counterpart (i.e., inverted or not)
- Inverted Mask. The entire masked layer will appear except for where the masking layer has punched a translucent hole through it. The amount of translucency in the hole is determined by the masking layer color(s).
  - Exceptions:
    - A gradient that varies to transparency. If the gradient starts with black the entire masked layer is visible (and opaque). When using any other color, the masked layer's opacity will vary from some level of opaque to transparent (when white is used) or to nearly transparent (when using virtually any other color but black)
    - A gradient that varies from white to black. The defined hole will vary from transparent to opaque. Note: Can act like its Transparency counterpart (i.e., inverted or not) that has a gradient mask that begins white and fades to transparent
    - A black masking layer. Shows the masked layer
    - A white masking layer. The masked layer is visible except immediately beneath the masking layer (it is transparent). Note: Can act like its Transparency counterpart (i.e., inverted or not)

#### NOTES:

For an Grayscale mask, the masked layer is transparent where the masking color is black (or #000000-hexadecimal/ ROGOB0-decimal). The masked layer becomes less transparent as the numerical value increases. When it reaches 50% transparency, the masking color has a value of #777777 or R128 G128 B128 (Gray), which is halfway between #000000 (Black) and #ffffff/R255G255B255 (White). Finally, the masked layer is completely opaque when the masking color's value reaches #ffffff (White).

A quick table using various shades of gray can also help. The colors are presented in RED, GREEN, and BLUE sequence for the numbers below. Each hexadecimal value is a two-number value while the RGB decimal values are given as Rx, Gx, and Bx where "x" is a decimal number.

#### Examples:

- BLUE represents a darker color than RED which is darker than GREEN.
- The INVERSE of RED ( #ff0000/R255G0B0) is TURQUOISE (#00ffff/R0G255B255)
- The INVERSE of GREEN (#00ff00/R0G255B0) is MAGENTA (#ff00ff/R255/G0/B255)
- The INVERSE of BLUE (#0000ff/R0G0B255) is YELLOW (#ffff00/R255G255B0)

## COLOR Value vs Transparency Table

Hexadecimal	Number			Percent (%)	
	R	G	B	Transparency	Opaque
#000000	R000	G000	B000	100	0
#555555	R085	B085	G085	67	33
#777777	R128	G128	B128	50	50
#AAAAAA	R170	G170	B170	33	67
#FFFFFF	R255	G255	B255	0	100