Affinity Photo

Manual Second Edition

Warren Watson ©2025

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Last Revised September 14, 2025

Preface

This is a user manual for Affinity Photo Version 1.10.6 (First Edition) and 2.6.3 (Second Edition). I use this package for photo editing and even painting. I have used Photoshop 6.0 and Photoshop Elements 12.0 for years.

"While Photoshop and Elements are similar and can both do basic edits, Photoshop gives users the utmost control in image design and the ability to do many things. If you have worked with Photoshop, Elements will feel extremely limiting. It has many of the key features of Photoshop without the advanced controls¹."

However, I have recently discovered Affinity Photo. It is an excellent software package and a very good substitute for Photoshop.

This manual is good for someone new to any photo editing software or new to just Affinity Photo. This manual summarizes the functionality of the various elements of Affinity Photo. The examples are from YouTube videos.

The techniques used by various digital artists are outlined here. These artists are Ally and Ezra Anderson of Affinity Revolution, Olivio Sarikas of Vienna, Austria, Richard Spezzano of Digitally Fearless, Rens Van Daalen (IAMRENSI) of the Netherlands, Scott Williams Photography, Dave Straker of Inaffinity, James Ritson (Affinity Photo product expert), Jeff Grant of Practical Affinity, George Peirson of HTG Photo, Elaine Giles and others.

If you have comments you wish to share, please send an email to <u>WarrenTheArtist1964@gmail.com</u> with **Affinity Photo** in the subject line.

Your photographic and artistic endeavours will expand with expertise in Affinity Photo. Learn and Enjoy...

¹ Photoshop vs Photoshop Elements | Head-to-Head (2021), June 21, 2021, Retrieved September 17, 2021 from https://www.designbuckle.com/adobe-photoshop-vs-photoshop-vs-photoshop-elements/

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1. In General

1.1 Photoshop

Any photographer or artist will likely have heard of Photoshop as far back as 1988². The versions are as follows³:

- Photoshop
 - o 1.0, 2.0, 2.5, 3.0, 4.0, 4.0, 5.0, 5.5, 6.0 and 7.0
- Photoshop Creative Suites
 - o CS, CS2, CS3, CS4, CS5, CS6
- Photoshop Creative Cloud
 - o CC (2013), CC 2014, CC 2015, CC 2017, CC 2018, CC 2019
- Photoshop 2020

Photoshop Elements was created in 2001. They have versions 1 through 15 and then 2018, 2019, 2020 and 2021. It strips out some of the Photoshop complexity and presents the average user with a cheaper package. I own Photoshop Elements 12⁴ (on disk), but always preferred Photoshop 6.0.

I have always used Photoshop 6.0 (also on disk). I know it so well, and it is such a good program that it never made no sense to upgrade.

However, it stopped working about a year ago when I bought a new computer. I googled the problem, and I was able to run this program in compatibility mode for Windows 98.



² Adobe Photoshop Version History, Pro Global Business Solutions, Retrieved September 17, 2021 from https://www.proglobalbusinesssolutions.com/adobe-photoshop-versions/

³ Lindblad, Mason, The History of Photoshop – Photoshop Through the Years, Filtergrade, September 22, 2020, Retrieved October 27, 2021 from https://filtergrade.com/history-of-photoshop-through-the-years/

⁴ Adobe Photoshop Elements, Retrieved October 27, 2021 from https://adobe.fandom.com/wiki/Adobe Photoshop Elements

I right clicked on my Photoshop 6.0 desktop icon and opened the file location. I found the executable (.exe) file and right clicked and chose its properties. The dialog box is shown above right. I clicked two boxes to run the program in compatibility mode for Windows 98 and to run this program as an administrator. I always run Windows 10 always as an administrator. It makes me feel like the boss (barely), not Microsoft.

This method stopped working early September 2021 after a Windows update. Windows 10 is very much like a virus. It fits the definition. It does things not wanted and slows down the performance of the computer. However, Adobe and Windows know that if they can get you to upgrade to the most recent software, they get more money. Who really can blame them? It was at this time, I fortunately purchased Affinity Photo.

My decision was initially based on cost. <u>Adobe Photoshop</u>⁵ costs \$12.99 CAD a month, and <u>Affinity</u> is one-time payment of \$74.99 CAD⁶. Affinity is an excellent software package which is just as good as Photoshop.

⁻

⁵ Photoshop, Retrieved October 27, 2021 from https://www.adobe.com/ca/creativecloud/plans.html?plan=individual&filter=all

⁶ Affinity, Purchased September 18, 2021, Retrieved September 18, 2021 from https://affinity.serif.com/en-gb/photo/

1.2 Affinity Photo in a Nutshell

Affinity help can be found at the following links.

Affinity Photo 1: https://affinity.help/photo/en-US.lproj/index.html

Affinity Photo 2: https://affinity.help/photo2/en-US.lproj/index.html

To get rid of dark mode: Edit---Settings---User Interface---UI Style: Light

The following sections are the most common features I use with affinity photo.

1.2.1 Document Size

Document --- Resize Document

If the document is 11 inches by 8.5 inches at 400 dpi and resample is not checked, then changing the dpi to 72 will keep all the data and change the dimensions to 61.111 inches by 47.222 inches. If resample is checked, data will be lost and the document will be 11 inches by 8.5 inches at 72 dpi.

1.2.2 Straighten an Image

- Choose the crop tool
- Press the straighten button.
- Left click and drag the mouse along a line that is near horizontal or vertical. The image will rotate so that line is horizontal or vertical (whichever is closer).
- Press the apply button.

1.2.3 Adjust landscape or portrait

Use Document --- Rotate 90° clockwise or counter-clockwise The same command is under Arrange, but that is for the active layer only.

1.2.4 Skew and Distort

To get a photo of an 18x24in painting to be rectangular with 90° angles, I use the Mesh warp tool. Kris LK uses the perspective tool instead of the distort filter---perspective⁷.

1.2.5 Levels Adjustment

Pro Photo Vector, Mike Davies, How to Use the Levels Adjustment Tool in Affinity Photo, YouTube, Premiered November 18, 2020, Retrieved September 8, 2025 from https://www.youtube.com/watch?v=LKtadhUl5wc

Colour Mode or Color Space

He uses RGB

He uses CMYK to get an image ready for printing.

Channels

Master

RGB

Alpha (transparency)

Add a Levels adjustment layer left click on the adjustments icon choose Levels

Levels adjustment (Master Channel)

Black level slider

Move black point into the photo

As you move right more pixels are made pure black

⁷ Kris LK, Skew, Distort & Perspective in Affinity Photo, YouTube, 16,039 views, Premiered April 11, 2021, Retrieved August 16, 2025 from https://www.youtube.com/watch?v=KD87rtx-Mns

Every pixel left of the line is considered pure black.

Press alt shows what is clipped as the slider is moved back and forth

Move slider just before something is clipped so details are not lost

White level slider

Move to the left to increase the white point

Every pixel to the right of the line is considered pure white

gamma -midtones slider

Drag to the left to lighten (below 1.000)

Drag to the right to darken (above 1.000)

Output Black Level

Move to the right to brighten the pure black pixels

Output White Level

Move to the left to darken the pure white pixels

Colour Channels

Red Channel

Instead of brightening or darkening, adding red or cyan to the image

Black Level

All pixels to the left are cyan in the shadows

White level

Add red to the highlights

All pixels to the right of the line are red in the highlights

Gamma

Drag to the left to add red to the midtones

Drag to the right to add cyan to the midtones

Output Black Level

Move to the right to add red to the shadows

Output White Level

Move to the left to add cyan to the highlights

The other colour channels are similar

Green and Magenta

Blue and Yellow

Just adjust until it looks good.

Alpha channel is transparency

Buttons

Opacity slider

Makes the level adjustment transparent

Blend Mode

Determines how adjustments combine with layer below

By trial and error

Gear Button controls the blend ranges

Two graphs: Source Layer Ranges & Underlying Composition Ranges

Left high-Shadows fully visible

Left low-Shadows fully transparent

Right high-Highlights fully visible

Right low-Highlights fully transparent

Merge

Adjustment layer is non-destructive and affects the layers below Merging it makes the adjustment destructive

Delete

Delete adjustments

Reset

Go to the beginning

Add Preset

Saves the adjustment so they can be applied to another image.

1.2.6 Brightness and Contrast

Left click on the adjustments icon

Choose Brightness and Contrast

Move the brightness slider to the left to darken

Move the contrast slider to the right to increase contrast.

1.2.7 Convert to Black & White

The following is done to convert a photo to black and white⁸.

Duplicate the layer

Right click on layer and choose duplicate

Hide the lower layer

Add an adjustment

Left click on the adjustments icon

Choose Black and White

Six sliders appear three warm colours (red, yellow green) and three cool colours (cyan, blue and magenta)

Sliding to the left darkens those colours

Sliding to the right to lighten the colours

Leaving at 100% is the centre (double click on circle centres it)

Red and yellow are the skin tones

Add another adjustment

Left click on the adjustments icon

Choose Levels

⁸ Peirson, George, HTG George, How You Can Make a Photo Black and White in Affinity Photo Tutorial, YouTube, 17,800 views, Premiered July 15, 2021, Retrieved July 18, 2025 from https://www.youtube.com/watch?v=GN1RtoKGgy4

2. Photographic Effects

A person interested in photography and photo editing will know and sometimes try to duplicate different photographic effects. This list includes the common ones.

A goal of a photographer is not simply recording the scene like a journalist would. He often wants to present the scene in an interesting way. A photograph must be more interesting a common postcard which is interesting because it documents a person's travels.

A photograph also has a center of interest. The background can be blurred or vignetted. A photograph is a piece of art and gives the viewer's eye a pleasing journey to the center of interest.

2.1 Shallow Focus Photography

A Blurred Background

A blurred background can be achieved with shallow focus photography. The background is blurred because the depth of field is shallow like with a large aperture, for example f4.5.

Bokeh

The Bokeh effect is achieved when light sources are blurred in the background. Therefore, the Bokeh effect can be achieved with shallow focus photography.

2.2 Blurred Photography

Panning

To show motion, typically the moving object is blurred, and the background is sharp. In panning, the camera is giving the same angular rotation to match the moving object. The object is sharp and in focus, while the background is blurred.

The Reciprocal Rule of Photography

Blur from motion or a shallow focus can be pleasing but blur from camera shake is not. The reciprocal rule states that the shutter speed must be greater than the reciprocal of the lens focal length⁹.

A wide-angle lens has a focal length of 35mm or smaller¹⁰. The shutter speed must be greater than 1/35 which usually means 1/60 is sufficient.

A telephoto has a lens focal length of 60 mm or greater¹¹. A zoom lens has a variable focal length. With a 200 mm lens, the shutter speed must be greater than 1/200.

When hand or camera shake is possible, a tripod with a timer, cable release or remote should be used. A photography may shoot with an elbow resting on a hard surface and will be surprised how much shake is picked up if the shutter speed is not sufficient because of low lighting or a large lens.

⁹ Mansurov, Nasim, What is the Reciprocal Rule in Photography? Photography Life, Last Updated on April 2, 2021, Retrieved November 24, 2021 from https://photographylife.com/what-is-reciprocal-rule-in-photography

¹⁰ A guide to wide-angle lenses, Adobe, Retrieved November 24, 2021 from https://www.adobe.com/ca/creativecloud/photography/discover/wide-angle-lens.html

¹¹ What is a Telephoto Lens and Why Should I Use One? Borrow Lenses, October 5, 2017, 4:34 PM, Retrieved November 24, 2021 from https://www.borrowlenses.com/blog/what-is-a-telephoto-lens/

2.3 The Golden Mean

The Fibonacci Sequence

This section is from chapter four of "The Aero Book¹²." The Fibonacci Sequence is the following iteration.

N	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
F_n	0	1	1	2	3	5	8	13	21	34	55	89	144	233	377	610	987	1597	2584

$$F_n = F_{n-1} + F_{n-2}$$

$$F_n = F_{n-1} + F_{n-2}$$
 $n = 2, 3, 4, 5, 6, ...$ $F_0 = 0$ and $F_1 = 1$

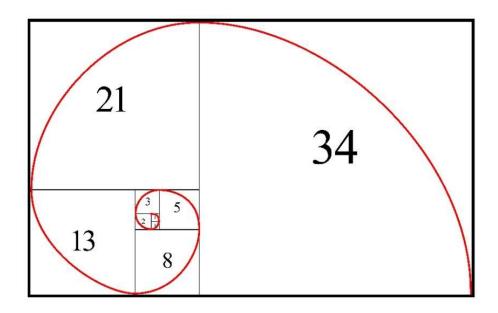
$$F_0 = 0$$
 and $F_1 = 1$

It was named for the Italian mathematician, Leonardo Pisano Bogollo (1175-1250) who was known as Fibonacci which means the son of Bonacci. The sequence can be seen in nature such as tree branches and sunflower seeds as well as reproducing rabbits. The Fibonacci spiral or golden spiral can be found in waves crashing onto the shore, the nautilus shell, the spiral galaxy, and even group photography to name just a few¹³.

The Fibonacci Spiral

¹² Watson, Warren, The Aero Book, ©2021, Available on Kindle, A preview is available at https://watsongallery.ca/MyBackPages/AeroBook/AeroBook.htm

¹³ Great Demo on Fibonacci Sequence Spirals in Nature - The Golden Ratio, YouTube Video, Posted February 3, 2017 by The Wise Wanderer, Retrieved December 20, 2020 from https://www.youtube.com/watch?v=iEnR8zupK0A



The sum of the squares of the Fibonacci numbers is the area of the above rectangle.

$$1^2 + 1^2 + 2^2 + 3^2 + 5^2 + \dots + 34^2 = 34 \times 55$$

The Golden Mean

The ratio of F_n to F_{n-1} approaches the golden ratio as n becomes large. The golden ratio, which is also known as the golden mean or the golden section, stabilizes at GR = 1.618034 at the seventeenth iteration ($GR = F_{17}/F_{16} = 1597/987$).

The golden mean is also obtained in geometry when the ratio of the longer segment (l_L) to the shorter segment (l_S) is equal to the ratio of the whole segment to the longer segment. The result can be obtained by completing the square as shown below.

$$\frac{l_L}{l_S} = \frac{l_L + l_S}{l_L}$$

$$(\frac{l_L}{l_S})^2 - (\frac{l_L}{l_S})^1 + (\frac{1}{2})^2 - \frac{5}{4} = 0$$

$$\frac{l_L}{l_S} = \frac{2}{\sqrt{5} - 1} = \frac{\sqrt{5} + 1}{2} = 1.618034 \dots$$

Architects have found the use of the golden mean artistically pleasing as found in the Parthenon of ancient Greece. Modernist architect Charles-Edouard Jeanneret, known as "Le Corbusier" (Swiss French, 1887-1965) used golden rectangles in his design of the L-shaped United Nations headquarters in New York¹⁴. Leonardo even uses the golden mean in his portrait of Lisa Gherardini¹⁵.

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¹⁴ Le Corbusier: A Colossus of Architecture, The Hindustan Times, Updated August 30, 2019, 17:19 IST, Retrieved November 14, 2020 from https://www.hindustantimes.com/inspiring-lives/le-corbusier-a-colossus-of-architecture/story-2GO79PTmqFZMdZilbZyetL.html

¹⁵ Glydon, Natasha, Math Beyond School, The Mathematics of Art, University of Regina, Retrieved November 13, 2020 from http://mathcentral.uregina.ca/beyond/articles/Art/art1.html

The Rule of Thirds

The golden mean is suspiciously close to 1.66. Modern day photographers use the golden mean but call it the rule of thirds¹⁶. This is a common rule or guideline of composition.

If the object of interest is placed in the centre, it may be unsettling if it is not quite perfectly centred. The object of interest is best placed at the horizontal and vertical third of the photograph. A simple example is if the horizon is placed halfway, the viewer may pay attention to the fact that it is not quite centered, and this becomes a false center of interest.

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¹⁶ Harker, Stephen, The Golden Ratio/Fibonacci Sequence: What It Means to Photographers, PHLEARN PRO Magazine, Where professionals learn Photoshop, Lightroom & Photography, February 26, 2020, Retrieved November 14, 2020 from https://phlearn.com/magazine/golden-ratio-fibonacci-sequence-photographers/

2.4 Golden in Color

The Golden Hours

The best time for photography is often a four-hour span around sunrise and a four-hour span around sunset. Shadows are more interesting at these times than at high noon, and the orange or red glow can be quite pleasing.

The Orange and Teal Look

The orange and teal look is often quite pleasing because the complimentary colors produce a nice contrast. Other complimentary pairs may not be as popular because the orange and teal look has the appearance of the golden hours.

2.5 Difficult Photography

Contre Jour

Contre Jour is achieved by shooting directly towards the light source. It creates interesting effects such as a silhouettes, light beams, and sundogs.

Fill Flash

Did you ever shoot a photograph at a dark concert and realize the flash has a small radius where its effect can be seen? An example of a fill flash is using a flash in broad daylight when the subject's face is close and is in shadow. The flash does nothing to the bright surroundings, but it helps fill in the shadow of the face.

Long Exposure

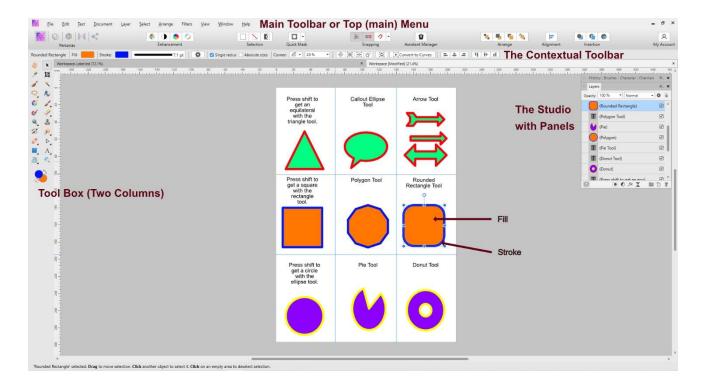
A tripod is often needed. A long exposure of water gets lacy looking water, and a long exposure of a night scene gets traces of moving light such as headlights and taillights.

The 8 Essential Photography Effects You Really Need to Know, February 7, 2018, Editorial Team, Retrieved November 21, 2021 from https://lstwebdesigner.com/eight-photography-effects/

2.6 The Rule of 100

If the R is raised by 30%, G and B must be reduced by a total of 30% to balance the tones and keep the whites and greys true.

3. The Workspace (User Interface)



David, Davro Photo fx (Davro Digital), Customize your Workspace in Affinity Photo, 3,308 views, March 19, 2020, Retrieved October 22, 2021 from https://www.youtube.com/watch?v=7E39fqcRPcU

Customizing

View---Studio

Panels

Layers

History

Navigator

Histogram

Adjustment

Channels

Brushes

Double click on tab to hide the panel-click once to see the panel You can move them around and play with the docking.

View --- Customize Tools--- Color Chooser is shown with two columns

Edit---Preferences---Keyboard Shortcuts Photo---Miscellaneous (under keyboard shortcuts not under preferences)

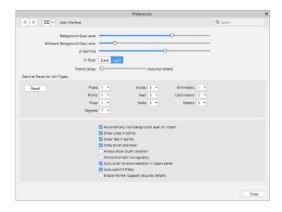
Set fill to Black and White

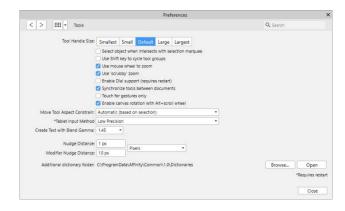
Set fill to 50% gray shift backspace

Edit --- Preferences --- General

Edit --- Preferences --- User Interface-can choose dark mode







Keys for Viewing

Ctrl 1-make photo fill to screen

Ctrl 0-Zoom to fit

Tab key remove panels from view

Guides:

Choose Move Tool (Arrow)

View --- Show Rulers (Ctrl r)

Click on horizontal ruler and draw out horizontal guide

Click on vertical ruler and draw out vertical guide

4. Personas

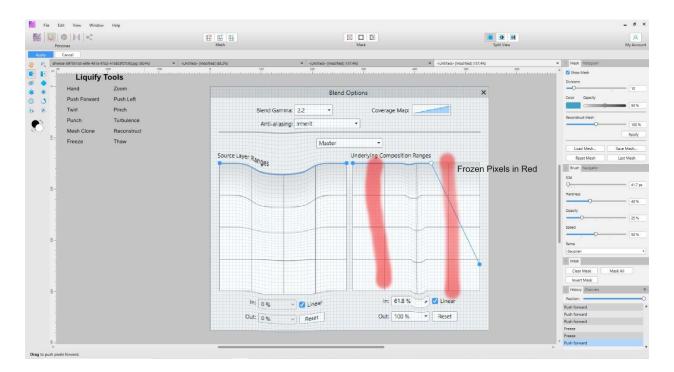
Ritson, James (Product Expert for Affinity Photo), Affinity Photo Windows Introduction, YouTube, 14,247 views, November 18, 2016, Retrieved October 23, 2021 from https://www.youtube.com/watch?v=1gTeZxQV9Mw

4.1 Photo Persona

This is the main editing environment and is the focus of this manual.

4.2 Liquefy Persona

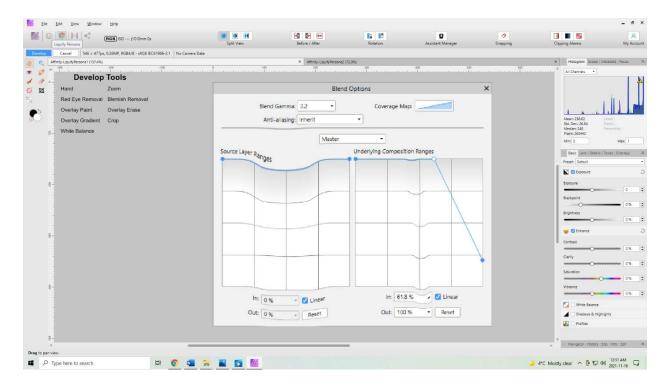
This persona provides mesh-based distortions.



4.3 Develop Persona

When a Raw image is opened. RAW file formats, other than .RAW, are Canon Raw Images (.CR2), Digital Negative Images (.DNG), Kodak RAW Images (.DCR), Nikon RAW Images (.NRW), Nikon Electronic Format Images (.NEF), and Sony Digital Camera Images (.ARW)¹⁷.

Raw based Adjustments



Basic

Exposure

Black point

Brightness

Contrast

Clarity

¹⁷ .Raw File Extension, What is a .raw file and how do I open it, Retrieved November 22, 2021 from https://fileinfo.com/extension/raw

Saturation

Vibrance

White Balance

Shadows and Highlights

Lens

Distortion

Chromatic Aberration

De-fringing

Lens Vignette

Post crop Vignette

Details

Detail refinement

Noise reduction

Noise Addition

Tones

Curves

Black and White

Split Toning

Overlays

Paint brush overlay

Gradient overlay

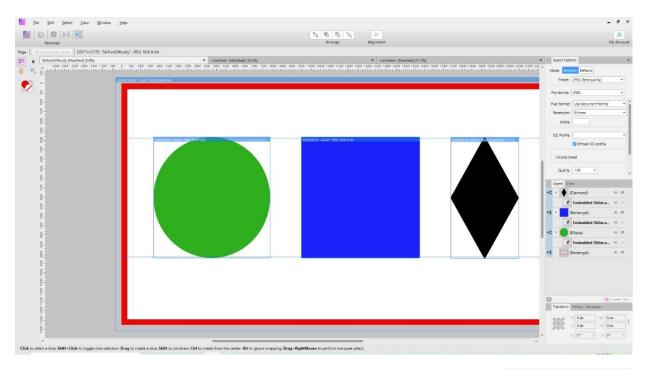
Assistant Manager---Tone Curve---Take no Action-Do not apply default tone curve

4.4 Tone Mapping Persona

This persona is for tone mapping 32-bit HDR imagery but can be used with 8-bit or 16-bit imagery.

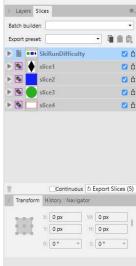
4.5 Export Persona

This persona is for printing, web design and analytic purposes.



The layers to be exported are called slices. The slice selection tool (the arrow) can be used, or the layer can be selected, and the create slice button can be pressed. The slice panel is chosen, and the slices can be exported individually or all together. When the export button is pressed, a folder can be chosen. This is where all slices will be stored. If the continuous button is checked (after a directory has been established), slices will be regularly saved.

Affinity Photo, Exporting Slices (Affinity Photo), YouTube, 8,049 views, June 5, 2019, Retrieved November 13, 2021 from https://www.youtube.com/watch?v=40VBcFE9kVI



5. Shortcut Keys

PC Ctrl Alt Macintosh Command Option

If you own a Mac, replace ctrl with command and alt with option. Since a keyboard shows capital letters, Ctrl M and Ctrl I mean no shift button. Ctrl Shift I and Shift Ctrl I mean the shift button is depressed.

If you press a number, the opacity of the current layer is changed. If 1 is pressed, that is 10%. If 0 is pressed, that is 100%. If two numbers are pressed in quick succession, for example 3 then 5, that is 35%.

If a number is pressed when a brush tool is selected, the opacity of the brush is changed. This includes the Paint Brush Tool, the Color Replacement Brush Tool, the Pixel Tool, the Eraser Brush Tool, the Background Erase Tool, the Dodge Brush Tool, the Burn Brush Tool, the Sponge Brush Tool, the Healing Brush Tool, the Inpainting Brush Tool, the Clone Brush Tool, the Blur Brush Tool, the Sharpen Brush Tool, and the Median Brush Tool. It seems anything with the word brush, but not the selection Brush Tool and the Smudge Brush Tool. The list consists of the tools with an opacity setting in the contextual toolbar.

Ctrl O Open

Ctrl N New document

Ctrl W Close
Ctrl S Save
Shift Ctrl S Save as

Ctrl G groups selected layers (hold down the shift key)
Shift Ctrl G ungroup (Top Menu---Arrange-group or ungroup)

Ctrl Z undo (can also use the history panel)

Shift ctrl Z redo

Ctrl 0 normal zoom
Ctrl + zoom in
Ctrl - zoom out
Ctrl c copy

Ctrl v paste
Ctrl x cut

Alt zoom out with magnifying glass tool selected

Alt click and drag to create a zoom area

Spacebar moves object with hand tool

Ctrl J duplicate layer

Ctrl resizing about the center

Shift resizing and maintaining aspect ratio
Shift rotate in 15 degree increments

[make brush smaller make brush larger

X switch between primary and secondary color

Ctrl D deselect

Ctrl Alt F repeat last filter with last settings

P Pen tool

I Color Picker Tool (local)

C crop tool

Default black and white colors (must set this)
Shift Backspace Default 50% grey and white colors (must set this)

X swap line (stroke) and fill

Edit --- Preferences --- Keyboard Shortcuts---Photo---Miscellaneous

Set Fill to Black and White d

Set Fill to 50% grey Shift Backspace

G Gradient Tool and Flood Fill Tool (Paint Bucket)

M Marquee Tools

Ctrl I Invert image (color negative)

Shift Ctrl I Invert selection

V Move or Transform Tool --- Hand Tool H Hand Tool (press spacebar anytime)

B Paint Brush Tool --- Color Replacement Brush Tool

B --- Pixel Tool --- Smudge Brush Tool

Ctrl B Grow/Shrink the selection