

CALIPER PRO SOFTWARE

SPECIFICATION

IMAGE EDITING

1. Cut, Copy, and Paste.
2. Selected copy by free hand AOL controlled by four arrow keys available on keyboard or mouse with zoom preview.
3. Crop, duplicate, restore
4. Resize
5. Compression
6. Conversion to other format BMP, JPG, TIF, PNG, GIF & PSD
7. Flood fill or spray with selected color at selected portion.
8. Grid creation; 5X5, 10X10 & 100X100 lines.
9. Drawing tool curve, line, square, and circle with node control and provision to change color & thickness of the line.
10. Write text in any color or font.
11. Pointer to place on an object in four directions with provision to change its color & thickness.
12. Eraser works only on line, arrow or on any drawing tool.(not on original image)
13. Camera Lucida
14. Montage feature to merge stored image together. Useful to Merge different focuses of same image.
15. Image stitching.
16. Highlighter.
17. Pixel by Pixel Correction by key board.
18. Multiple image folder with Search facility.
19. Filter application on selected area.

VIEW

1. Zoom in/out
2. Zoomed preview
3. Rotation at 90, 180,270 or custom
4. Image flipping; horizontal or vertical axis
5. Intensity histogram.
6. Image Information
7. Redo/Undo on all operations.
8. Ruler in Various units.
9. Slide show.

IMAGE PROCESSING

1. Background subtraction and contrast enhancement of color or monochrome images
2. Arithmetic image functions (Boolean Math; Add, AND, OR, XOR, DIFF, MIN, MAX, +, -, /, *, And Simple).

ROUTINE FILTERS

1. Invert, Brightness, Contrast, Hue, Saturation, Blur, Noise Remove, Emboss, Engrave, Gamma R, Gamma G, Gamma B, Yellow, Magenta, Cyan, Mosaic, Smooth, Desaturation, Pseudo Color, Colorize, Oilify, Despeckle, Postarize.

SPECIAL FILTERS & KERNELS

High Boost, High Spatial, Low Pass Spatial, Ranking (Max, Med, Min), Point detection, Line detection, Homogeneity

EDGE DETECTION

Laplacing, Sobel, Kirsch, Prewitt Gradient, Shift & Difference, Combine, Contrast Base, Quick, Range And Variance.

MORPHOMETRY

Skelotizing, Pruning, SKIZ, Histogram Equalization, Histogram Smoothing, Histogram Peak, Histogram Valley, Segmentation by Over/Under and Quantized, Contouring, Dilation / Erosion on Binary, Gray & colored Images, Opening/Closing on Gray & Binary Images, Special Opening/Closing, Split/Combine Of RGB, YUV, YIQ, XYZ, & HSL, Changing any Image to 1, 4, 8 & 24 Bits, Medial Axis. Transformation, Halftone.

Image Addition, Image Average, Image Subtraction, Image Multiplication.

MEASUREMENT

- a) Spartial calibration
- b) Line measurements for Distance, Length, Width, Perimeter, Angle, Three Point Radius.
- c) Area by enclosed line controlled by four arrow keys available on keyboard arrows with zoomed preview.

REPORT

- a) Three options: Direct printout with original image processed Image & Tabular results
- b) Export to MS Office or Excel for further modification.