

Get perfect quality every time using 1-Touch laser photo

Laser engraving photographs with exceptional quality and lasting beauty has never been easier! The 1-Touch Laser Photo™ software application from Universal Laser Systems allows you to produce stunning laser engraved photos quickly and easily on marble, plastics, metals and other substrates.

Selecting a suitable photograph is an important first step. A well-lit, high-contrast image that has good definition between elements will produce the best outcomes. Images with low lighting, poor contrast should not be considered for laser engraving. In any photo where the subject is people, facial quality is the most important element. Facial features in deep shadow will make details difficult to see once laser engraved. If you have an expansive background of light colour behind your subject, such as pale blue sky, it will engrave as a dark area. You may wish to crop it out using image editing software.



Marginal or poor images can be modified with image processing software. Compare the image at the left with the one on the right that has been enhanced with Adobe Photoshop boosting brightness and contrast

corrections, if appropriate. Often marginal images can be modified with image processing software such as Adobe® Photoshop® or Photoshop® Elements to change resolution, adjust brightness, contrast and sharpness levels, make shadow and highlight adjustments, or drop out backgrounds.

Always begin with high-resolution images. The resolution of a digital image is defined as the number of pixels it contains. Do not enlarge digital photos beyond their original size, it will cause the image to become blurry, pixelated and unsuitable for engraving. The table below provides guidance on the image size that will give you greatest quality.

Laser technology is highly flexible and is capable of engraving on many thousands of materials. However, not all materials will produce a good result due to the unique make-up of the particular material and how well it reacts to the laser wavelength to capture the detail of the original image. With nearly 30 years of experience in manufacturing laser systems and recognised as experts in laser material processing, Universal Laser Systems has tested material/laser interaction on thousands of organic and inorganic materials. They have incorporated this knowledge into 1-Touch Laser Photo to provide users with the most advanced engraving filters and automatic settings for common materials that produce the best contrast for engraving.

Photo Resolution	Engraved Image Size (cm)	Engraved Image Size (in)
.5 mega pixels	2.54 x 25.400	1 X 1
2 mega pixels	10.160 x 15.240	4 x 6
3 mega pixels	12.700 x 17.780	5 x 7
3.5 mega pixels	15.240 x 20.320	6 x 8
4 mega pixels	17.780 x 22.860	7 x 9
5.5 mega pixels	20.320 x 25.400	8 x 10
7 mega pixels	22.860 x 30.480	9 x 12
7.5 mega pixels	25.400 x 33.020	10 x 13
8 mega pixels	30.480 x 30.480	12 x 12



To judge the suitability of a picture for engraving, convert colour photographs to black and white and take a look. This technique will enable you to see any trouble spots. You can then make a determination about the image, choosing to make



- Acrylic
- Painted Acrylic
- AlumAMark®
- Anodised Aluminium
- Bare metal with marking compounds like CerMark™ or TherMark™ brands
- Coated Metal
- Glass
- Leather
- Micro Surfaced Plastic – dark on light
- Micro Surfaced Plastic – light on dark
- Tile
- Wood

Want to see what your photo looks like on wood? Marble? Glass? 1-Touch Laser Photo's feature of *Print Preview* will display what the engraved image will look like on the chosen material before ever turning on your laser system. A list of dozens of simulated backgrounds are available to choose from, or import your own! For example, if the wood filter is selected, you can view a background simulation suggestive of the grains of cherry wood, mahogany, cedar, pine and other types of wood. With a click of a button, you can see a preview of what your photo will look like engraved onto that material. Multiple simulated backgrounds based on different varieties of materials are available for each filter.

Lens diameter will effect engraving quality and detail. To attain the broadest use, Universal Laser Systems has designed 1-Touch Laser Photo to perform its magic using a standard 2.0" lens, the most commonly used optic in the majority of laser systems. Working with optics that produce smaller spot sizes can improve the detail in your engraving, but it is no substitute for a good image.

The capability to crop and scale while maintaining aspect ratio, mirror and rotate imported or scanned images can be achieved within 1-Touch Laser Photo, requiring no third-party imaging software. Based on the material you choose to engrave, 1-Touch Laser Photo automatically determines the proper contrast, filter and grayscale levels to prepare the photograph to achieve best results. It automatically calculates the ideal laser speed and power settings.

Using 1-Touch Laser Photo software is simple. The user interface is clean and navigation is straightforward. Laser engrave your photos in these four easy steps (above):

"Our goal was to make an affordable product that was simple to use and produced exceptional results," says Chris Risser, Systems Product Development Manager with Universal

1 Open the file you want to engrave in 1-Touch Laser Photo.

2 Adjust the height and width according to your material size.

In the **Crop Tool** section, click on the shape you wish to engrave.

3 Then select the material. Choose a material in the drop down menu, then apply filter.

(1-Touch Laser Photo will automatically reverse the image depending on the chosen material.)

4 That's it and it's ready to Print.

1-Touch Laser Photo works with any image from your computer – whether it's a scanned image, downloaded from your camera or phone or even a stock photo.

With 1-Touch Laser Photo, you can transform a photograph into profits in no time.

Laser Systems. Most laser photo software packages on the market use a dither pattern to render photos. 1-Touch Laser Photo software uses line screens to prepare the photo. The line screens render the image that produces a more realistic look, aesthetically closer to the original photograph. A colour photo of this man is rendered in 1-Touch Laser Photo and engraved on marble with remarkable detail. 1-Touch Laser Photo knows when to change the screen pattern to compensate for different materials and their ability to achieve the maximum image resolution to create stunning quality.

The engraving on cherry wood cleverly utilises the wood grain to add a dramatic effect to the sky while the overall detail remains sharp. The elk engraved on leather retains all the original detail and tonal quality while producing a warm, realistic representation.

The striking visual results (below) and ease of use have won 1-Touch Laser Photo wide popularity from users of all brands of laser systems. Users love the lifelike facial features and the impressive detail they get from the



HDR Photo Engraving on cherry wood

software functionality of 1-Touch Laser Photo whether engraving on wood, leather, glass, marble, plastics or other materials. You can become an expert and attain brilliant results with 1-Touch Laser Photo because it takes all the guesswork out of laser engraving photographs. To download a free 30-day trial visit www.ulsinc.com.

About the Author: Darshan Dawson is a Marketing Communications Specialist with Universal Laser Systems focused on the personalisation, awards and recognition business line.



Universal Laser Systems is a manufacturer of a broad line of laser systems for cutting, marking and engraving. The unique modular design of ULS products provides the ultimate in flexibility, ease of use and reliability.



Engraving on leather