

How to use PhotoGrav.

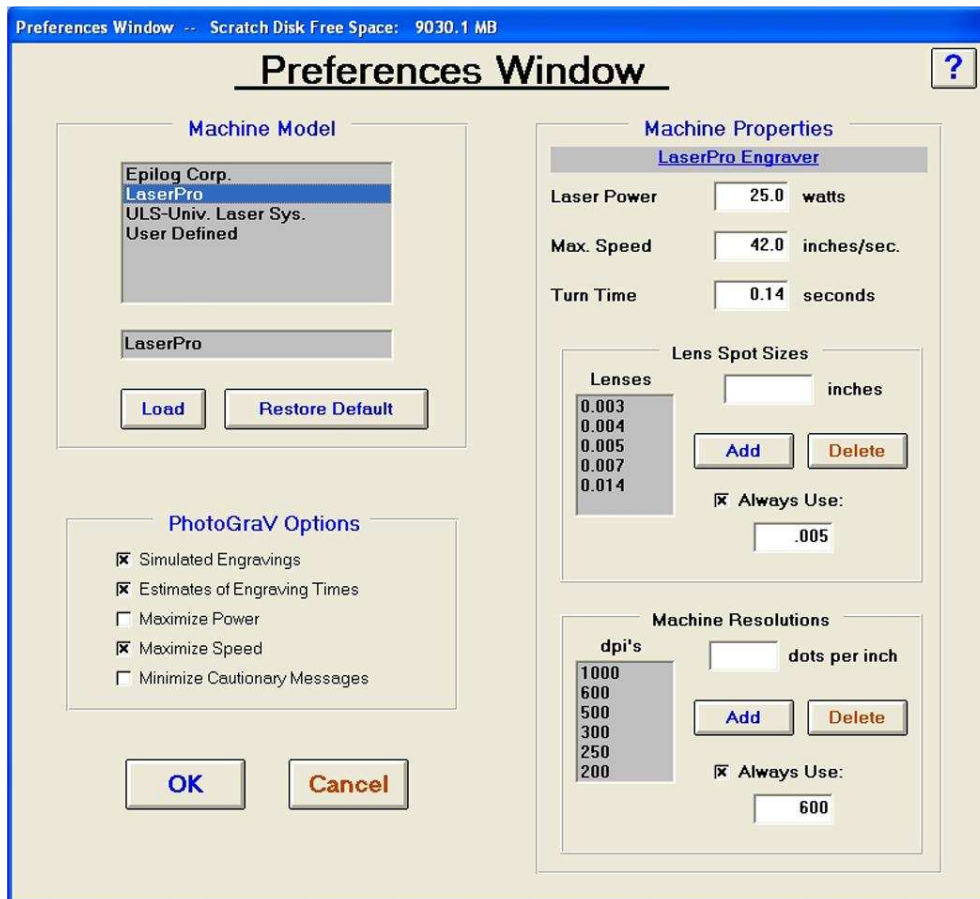
This document will help you setup and use the PhotoGrav Software.

PhotoGrav is a program that takes the photograph you see on the screen and changes it into laser language (or what the laser needs to see to engrave your image the way you see it on the screen). It does this by knowing what machine you are using and matching it with the material you are using.

Processing your image through PhotoGrav should be the last step right before sending it to the laser.

Changing the size or shape of the image after processing will give you less than desirable results.

1. Open your PhotoGrav software.
2. Click File, then Preferences. In this window you have to tell the software what machine you have.



Starting with Machine Model.

V Series, M Series, ZX Series users choose LaserPro.

Accuris PowerSharp users choose User Defined.

Machine Properties.

Laser Power = the wattage of your machine.

Accuris PowerSharp 12, 14 and 16 = 30 Watts

Accuris PowerSharp 42, 44 and 46 = 60 Watts

Max. Speed = Speed of your machine.

V Series 12 watt = 24.0

V Series 30 watt, M Series All watts = 42.0

ZX Series all watts = 80.0

Accuris PowerSharp 12, 14, 42, 44 = 40.0

Accuris PowerSharp 16 and 46 = 60.0

Turn Time = Leave it as default setting.

Lens Spot Size = Beam Diameter.

V, M and ZX Series have 4 different lens.

1.5 inch lens	Purple in Color	0.003
2.0 inch lens	Blue in Color	0.005
2.5 inch lens	Gold in Color	0.008
4.0 inch lens	Red in Color	0.013

Accuris PowerSharp

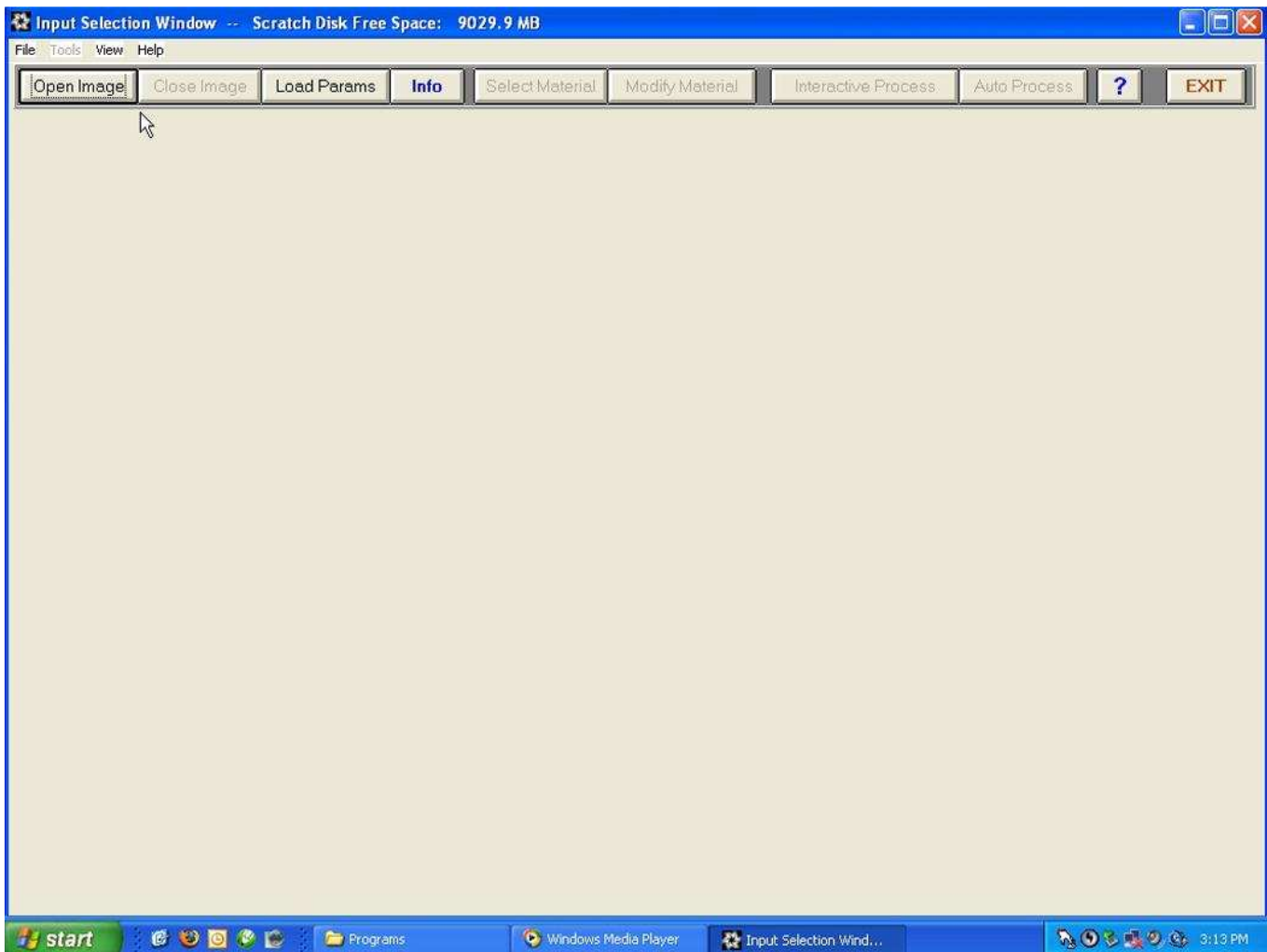
1.5 inch lens	0.003	This is the default lens that comes with machine.
2.0 inch lens	0.005	
2.5 inch lens	0.008	
4.0 inch lens	0.013	

Machine Resolution will change from job to job.

In PhotoGrav Options make sure Max Speed is selected. You want the machine to finish as soon as possible.

Once Finished, Click OK.

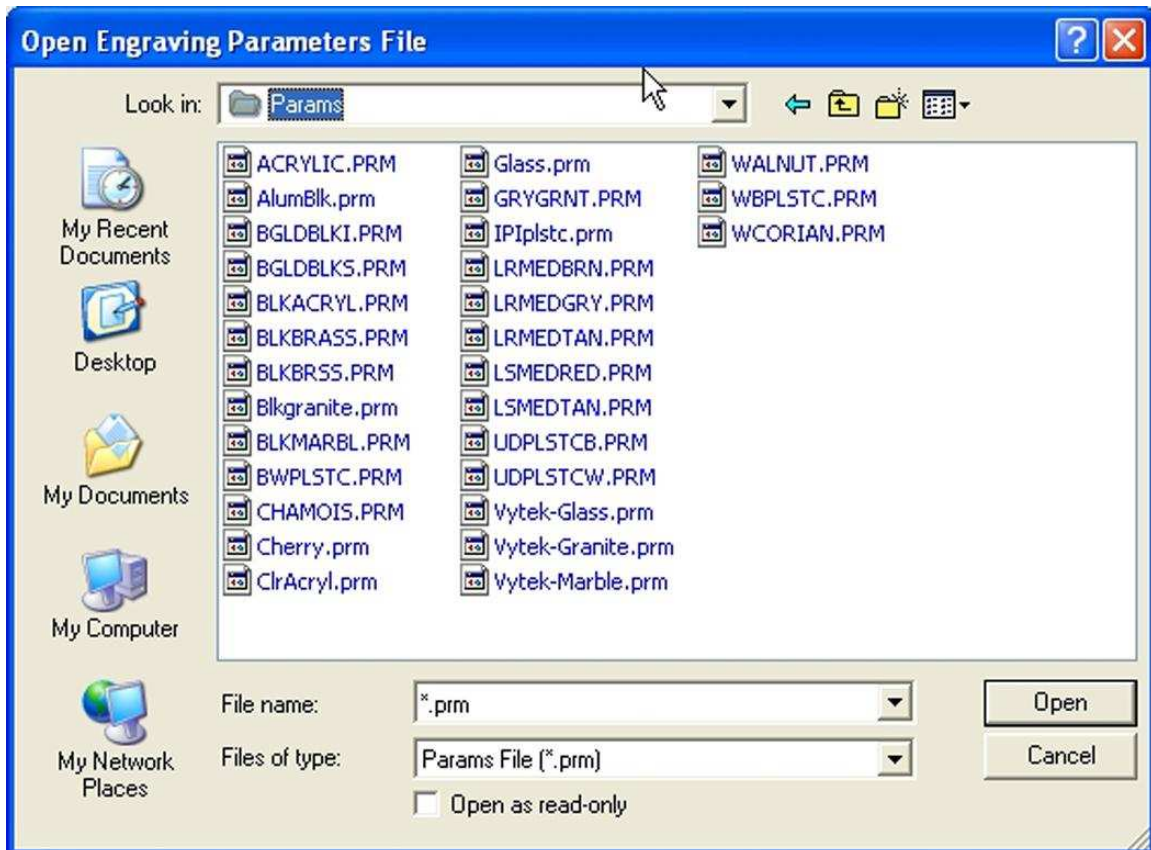
3. Click Open Image. The image must be saved as an 8-bit grayscale image. It will not open any other type of image.



4. Next you are going to tell PhotoGrav what type of material you are using. Click Load Params.



5. You will direct the browser C:\PhotoGrav\Params folder. Then choose the material you are using. (You can point this to any new params you have downloaded from www.photograv.com)



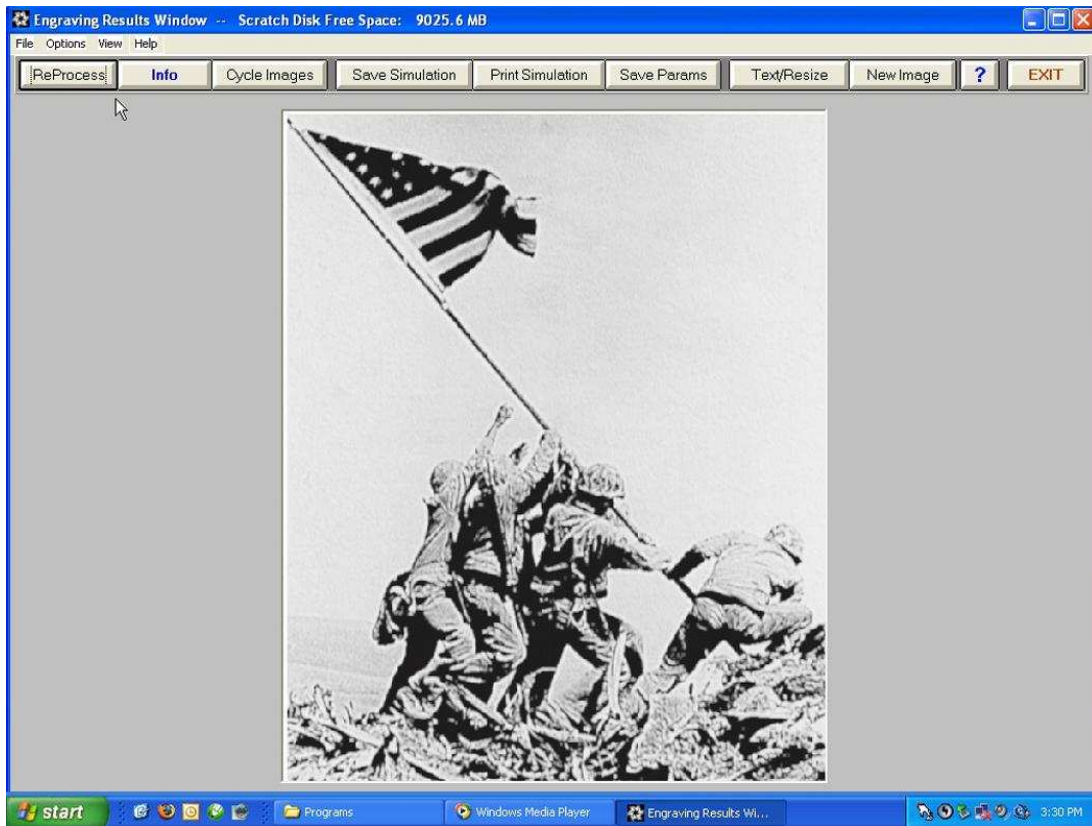
6. You will then click Auto Process, to have software process your image.



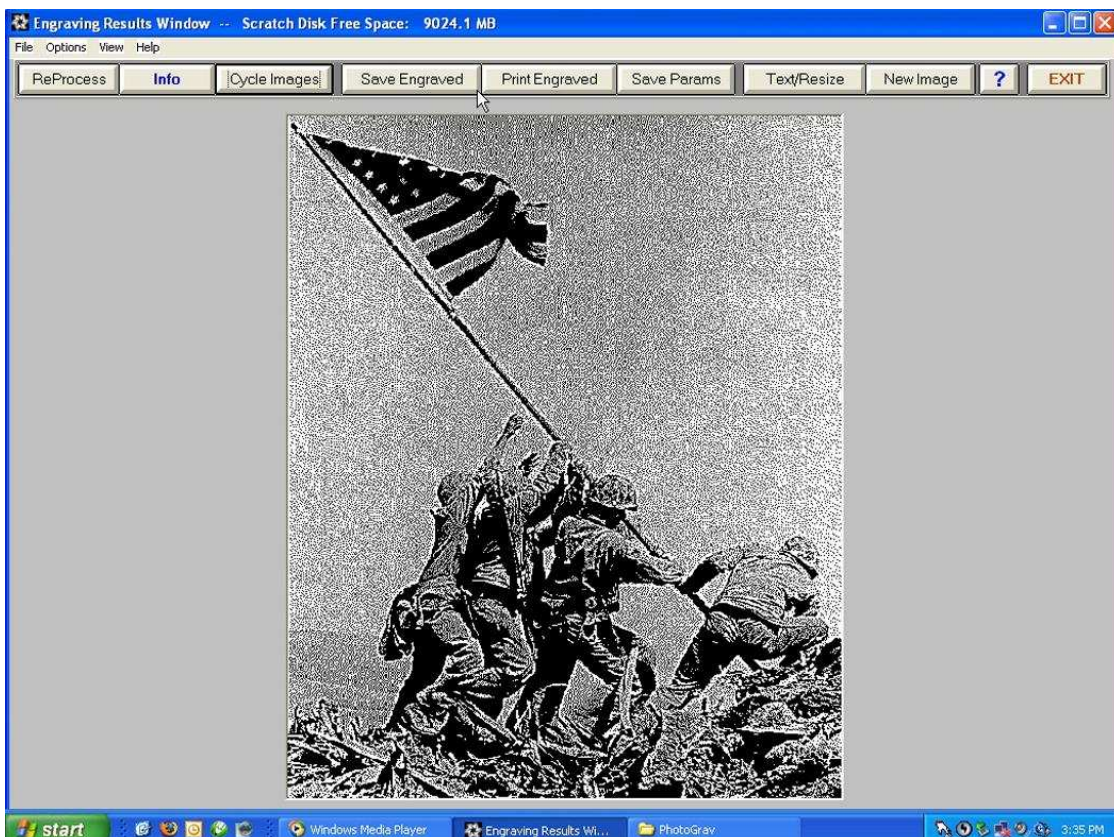
7. You can use the Cycle Images button, to see the 3 different images. Your Simulated image, your Engrave image and your Original image.



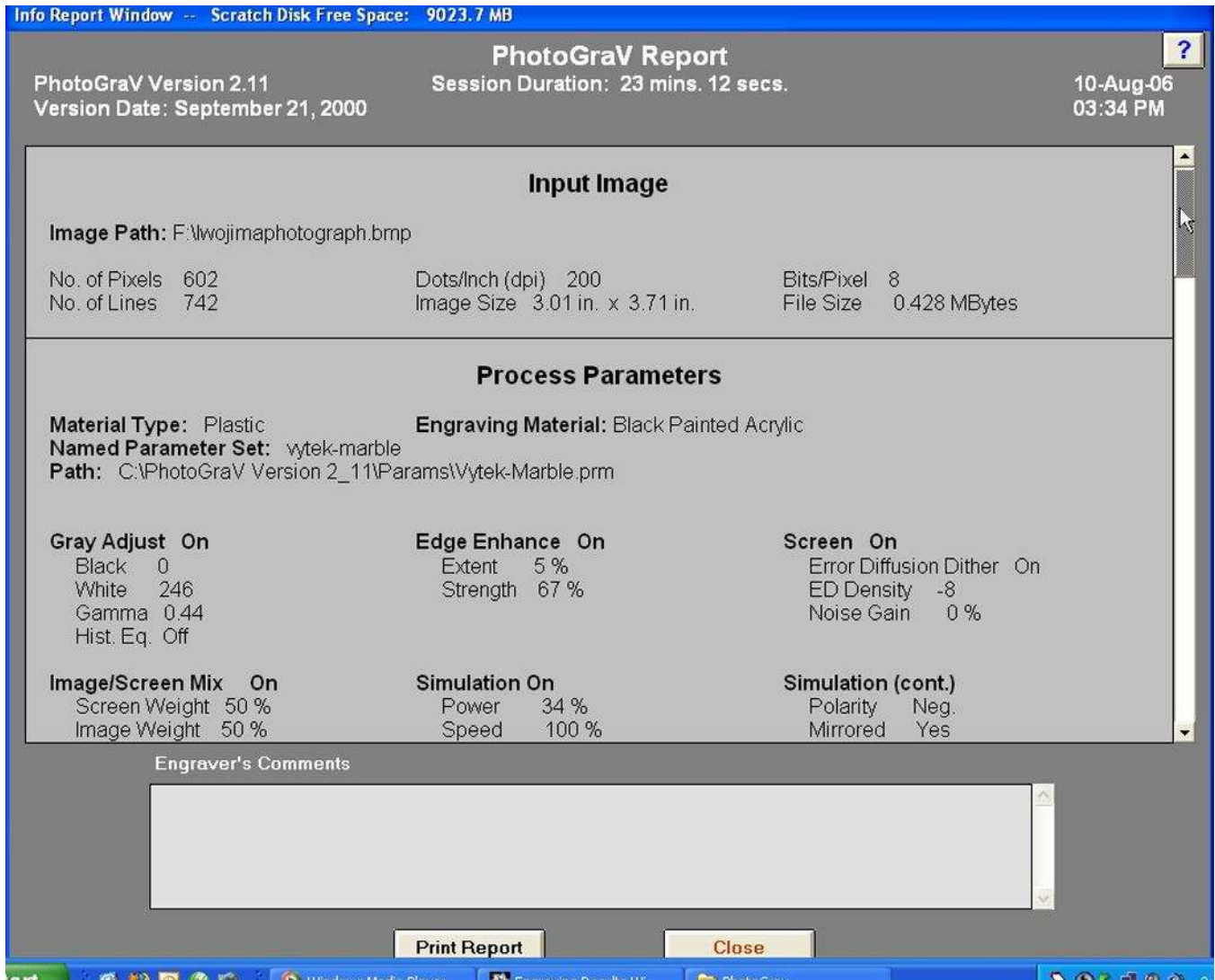
8. If the simulated image doesn't come out right, you can do some adjustments by clicking Re-Process. There are a lot of setting in re-process, to many to talk about in this how to. Once finished changing things click Proceed to get back to this screen.



9. Cycle through the images until you get to the Engraved Image. Click Save Engraved. This is the file you will be sending to the laser.



10. You can click the Info Button to see a detailed report of your image. To include power/speed settings, DPI Settings, File Name, material type and many other things.



11. If you print the report to your desktop printer it will come out like this. You can keep this to reference for the next time you do this job.

PhotoGraV Report			
PhotoGraV Version 2.11 Version Date: September 21, 2000	Session Duration: 25 mins. 46 secs.	10-Aug-06 03:37 PM	
Input Image			
Image Path: F:\lwojimaphotograph.bmp			
No. of Pixels 602	Dots/Inch (dpi) 200	Bits/Pixel 8	
No. of Lines 742	Image Size 3.01 in. x 3.71 in.	File Size 0.428 MBytes	
Process Parameters			
Material Type: Plastic		Engraving Material: Black Painted Acrylic	
Named Parameter Set: vytek-marble			
Path: C:\PhotoGraV Version 2_11\Params\Vytek-Marble.prm			
Gray Adjust On	Edge Enhance On	Screen On	
Black 0	Extent 5 %	Error Diffusion Dither	On
White 246	Strength 67 %	ED Density	-8
Gamma 0.44		Noise Gain	0 %
Hist. Eq. Off			
Image/Screen Mix On	Simulation On	Simulation (cont.)	
Screen Weight 50 %	Power 34 %	Polarity	Neg.
Image Weight 50 %	Speed 100 %	Mirrored	Yes
Threshold On	FocusX 0 %		
Thresh. Value 130	FocusY 0 %		
Laser Engraver: LaserPro			
Power 25 watts	Lens 0.005 inches	Engraver dpi	600 dots/inch
Max. Speed 42.0 inches/sec.	Actual Speed 42.0 inches/sec.	Turn Time	0.140 sec./turn
Process Results			
Engraved Image: Unsaved	602 x 742 x 8 bits	0.428 MBytes	
Simulation: Unsaved	602 x 742 x 24 bits	1.279 MBytes	
Est. Horiz. Engrave Time 7 min 51 sec	PhotoGraV Process Time 3 secs.		
Est. Vert. Engrave Time 6 min 52 sec			

Engraver's Comments

12. Import the Engraved image into your software (EngraveLab, Laser Master 2, Corel Draw, Adobe Illustrator, AutoCad) and File/Print and send it to the laser.
13. These instructions are the bare essentials to process an image. For more information feel free to visit www.photograv.com and look at the FAQ section.