GravoStyle 5 LASER Option
User Manual
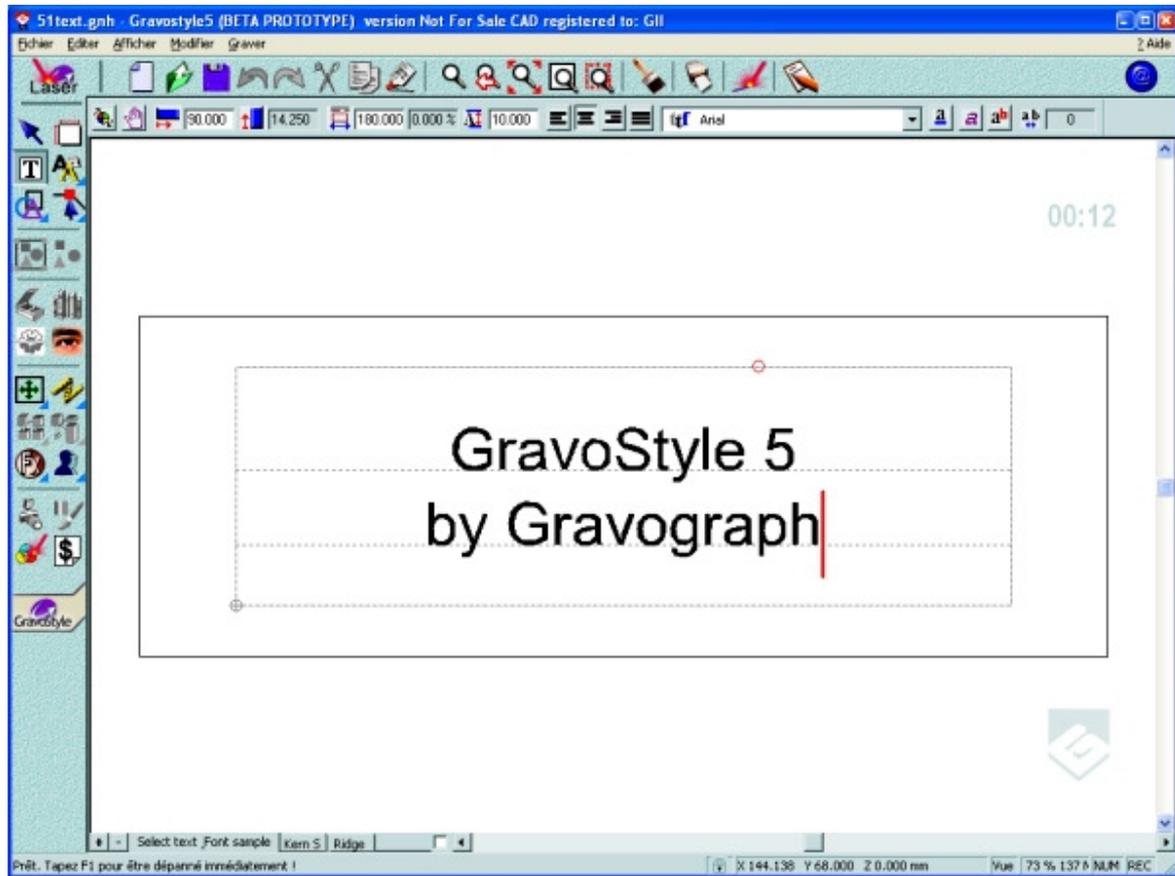
Table Of Contents

G5 Laser Option

 Window

When many document or program windows are open, quickly locate GravoStyle window thanks to the Gravograph logo displayed in the bottom right corner.

◀GravoStyle 5 Menus

Click a menu for more information.

≫ **?Help**

Contents **Search** **Use Help**	Consulting on-line Help
About	Commanding and integrating a program option or level

≫ **File**

New **Open** **Save** **Save as**	Creating a composition Opening a .gnh file Saving while working Saving a composition
Open a model	Creating a composition from a template
Save a model	Saving a composition as a template
Find **Information**	Finding a .gnh file Information about the current composition
Import **Export**	Importing objects in composition Exporting objects to an external program
Insert object	Retrieving a bitmap image saved with vectorial contours
Vectorize / Vectorize Parameters **Scan / Select scanner**	Vectorizing an image Digitizing an image
Print **Print preview** **Print parameters**	Printing the composition
Recent files	List of the last four files opened
Exit	Close the window and exit the program

≫ **Edit**

Undo **Redo**	To cancel/restore a procedure
Cut **Copy** **Paste** **Delete**	Placing objects
Select all	Selecting objects
Pointer position **Snap mode** **View object** **Mouse use**	Work area
Clear Undo Memory	Deleting the saved cancellations
Options	Customize the program

≫ View

Zoom **Last Zoom** **Max Zoom** **Zoom material** **Zoom selection**	Zoom tools
Redraw **Quick Redraw**	Redisplaying the composition
Wire direction	Viewing draw direction
Graphic mode	Display mode for engraving paths
Arrow direction	Viewing draw direction

≫ Modify

Text▶	Using the Advanced Text functions (non-horizontal text, font editor, etc.)
Shapes▶	Drawing geometric shapes
Align	Aligning objects
Effects▶	Applying effects to objects
Duplicate▶	Duplicating an object
Transform▶	Transforming an object
Tasks▶	Creating professional objects
Material	Configuring the composition
Guide lines	Managing guide lines
Symbols	Placing objects from program library
PhotoStyle	Processing a bitmap image using PhotoStyle
Bitmap Editor	Retouching a bitmap image
Wysiwyre	Displaying 2D render on material

≫ Machining

Setup machines	**To add a target machine**
Laser	**To open the L-Solution dialog box**

GravoStyle 5 Toolbars

Main Bar

New **Open** **Save**	Create a new composition, or use a composition that you have saved as a file. Save the composition regularly to avoid the accidental loss of your work.
Undo **Redo**	Each action you perform is saved in the program's Undo/Redo memory. You can therefore cancel or restore a series of steps to return to a specific stage of preparing a composition.
Copy **Paste** **Cut**	Call up these commands to insert an object from another composition or from an external document into the composition.
Zoom area **Last zoom** **Max zoom** **Zoom material** **Zoom selection**	Use these commands to improve the composition's display quality and size.
Redraw	Regularly force the redisplay of the composition on-screen.
Print	Produce a paper printout for a pre-engraving presentation (test or engraving check).
Comments about the composition	Attach your personal notes to the current composition.
Web links	Contact us via Internet.
L-Solution dialog box	Set and transfer the engraving parameters to your machine.

Toolbox

Working modes	Creating objects	Handling objects
Material mode 🅓	Advanced Text 🅓	Group 🅓
Selection mode 🅓	Symbols 🅓	Ungroup 🅓
Text mode 🅓	Tasks 🅓	Align 🅓
Drawing mode 🅓		Transform 🅓
Point mode 🅖		Measure 🅖
		Duplicate 🅖
		Effects 🅖

Engraving	Using a bitmap image	Engraving environment
Wysiwyre 🅓	PhotoStyle 🅓	Gravostyle **for IS machines** 🅓
Engraving quotation 🅓	Bitmap Editor 🅓	Laser **for L-Solution machines** 🅖
Assign a laser path 🅖	Scanner 🅖	CAM for IS machines 🅖
	Vectorize 🅖	

🅓**Functionality available in Discovery level**

🅖**Functionality available in Graphic level**

◁Installing a new target machine

Open the **Machines dialog box:** click the **Setup machines** command in the Engraving menu.

Close When you close the Machines dialog box, a message will ask if the default target machine's dimension area become the **default dimensions.**
Yes Click to assign these dimensions to each blank composition.

Creating a target machine		
The new target machine is featured in the list of the machines installed in the **Machines dialog box.** It is automatically designated as the target machine by default.	A.	⊞ Click opposite the **Add a machine** icon.
	B.	⊞ Click opposite the **type** of your machine.
	C.	**Right-click** the machine **model** in the list of available machines.
	D.	Click the **Add this machine** command in the contextual menu.
🛈 **If you ticked option L-Solution Printer at the end of the setup:**		
E. Click **L-Solution** in the **List of installed printers** of the **Configure output dialog box.**	E.	Double-click on **Add to Windows** in the **Configure output dialog box** and add the target machine to Windows: the target machine appears in the **List of installed printers.**
OK Click. Continue the installation.		OK Click.
	F.	Set your machine's properties in the **L-Solution Installation dialog box:**
		◉ Click the **Bridge** fitted on your machine.
		▼ Click the **Laser power** (10 to 60 Watts, see the serial plate at the back of your machine).
		OK Click.
	G.	Type the **Name** of the target machine in the **Machine Properties dialog box.**
		OK Click.
Designate by default	1.	**Right-click** a target machine.
	2.	Click the **Set as default** command in the contextual menu: the default target machine becomes active in the **Material dialog box.**
Properties	1.	**Right-click** a target machine.
	2.	Click the **Properties** command in the contextual menu.
	3.	Configure the target machine in the **Machine Properties dialog box.**
Delete	1.	**Right-click** a target machine.
	2.	Click the **Delete** command in the contextual menu.

Adding a target machine to Windows

Install the target machine as a printer (the order of the procedures varies depending on the Windows system install on your computer).

The **installed machine** features in the **Printers** folder and its name is displayed in the **Configure output dialog box.**

1. Install the target machine. The **Add printer Wizard** opens when you double-click **Add to Windows** in the **Configure output dialog box.**

2. ⸢Next>⸥ Click in the **Add printer Wizard.**

3. Click ◉**Local printer (☐unclicked Plug & Play box).**
   ⸢Next>⸥ Click.

4. Click the **Port** which the cable linking the computer and the machine is plugged into. ⸢Next>⸥ Click.

LPT	if the connection is hooked up using a Gravograph parallel cable plugged into the machine's parallel port and into one of the computer's LPT ports.
COM	if the connection is hooked up using an adapted Gravograph serial cable plugged into the machine's serial port and into one of the computer's COM ports. ❗ **Configure the serial link.**
FILE	if the engraving is saved in the form of a file for subsequent transfer to your machine.

5. Select the **Windows driver** used to communicate with the target machine.

You are adding a target machine for the first time. **You have a new version of the L-Solution driver.** ❗ **Each time you receive a new version of the L-Solution driver on the GravoStyle CD-ROM, consider updating the driver for each existing L-Solution target machine.**	a. ⸢Have Disk⸥ Click in the **Add printer Wizard.** b. ⸢Browse⸥ Click in the **Install from Disk dialog box.** c. Place the GravoStyle installation disk in your computer's CD-ROM drive. d. In Windows, double-click the 📀**LaserStyle drive** 📁**Driver L-Solution folder** 📄**glaser.inf file** e. ⸢OK⸥ Click in the Install from Disk dialog box. f. Click the **L-Solution printers driver.** ⸢Next>⸥ Click. g. If you are installing a **new version of the driver,** click ◉**Replace the existing driver.** ⸢Next>⸥ Click.
You have already added a target machine referenced by the L-Solution driver.	a. ▼Click the **Gravograph-New Hermes Manufacturer,** and then on the **L-Solution driver.** ⸢Next>⸥ Click. b. Click ◉**Keep the existing driver.** ⸢Next>⸥ Click.

6.   Type the machine's name under **Printer name.** Next> Click.

7.   Click No to avoid designating this machine as the default printer.
     Next> Click.

8.   Click Do not share this printer.
     Next> Click.

9.   Click No to avoid printing the test page.
     Finish Click.

10. **Continue installing the target machine.**

Setting the properties of a target machine in Windows

1. Select the target machine to be configured in the L-Solution dialog box.

2. Spooler Click: the print manager window for the machine opens.

3. Click the **Properties** command in the **Printer** menu.

4. Modify the properties of your choice in the target machine's **Properties dialog box.**

5. Close the printer's Properties dialog box.

6. Close the print manager window.

To bring up the Windows contextual help, click this box, then a zone in the dialog box.

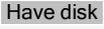|	
Configuring the serial link Synchronize the serial link parameters between the computer and the engraving machine each time you • **add a target machine** using a COM port. • select this target machine to engrave the composition. **If the serial parameters for the computer and the engraving machine are different, errors may occur during transfer, which will alter the execution of the engraving.**	a. In the target machine's **Properties dialog box,** click the **Ports** tab. b. In the list of ports, click the **COM port** which the cable linking the computer and the machine is plugged into. c. Configure Port Click. d. In the **COM Properties dialog box,** click the **Parameters** tab. e. Key in the serial parameters for the machine (see the Gravograph user manual). f. OK Click.
Designate the type of data transferred to the machine	
Windows 98	a. In the **Properties dialog box,** click the **Details** tab. b. Spool Settings Click. c. Click the **RAW** default data type.
Windows 2000	a. In the **Properties dialog box,** click the **Advanced** tab. b. Print Processor Click. c. Click the **RAW** default data type.

Updating the L-Solution driver	a.	New Driver Click in the target machine's **Properties dialog box.**
	b.	Have disk Click in the **Add printer Wizard.**
	c.	Browse Click in the **Install from Disk dialog box.**
	d.	Place the GravoStyle installation disk in your computer's CD-ROM drive.
	e.	In Windows, double-click the **LaserStyle drive** **Driver L-Solution folder** **glaser.inf file**
	f.	OK Click in the Install from Disk dialog box.
	g.	Click the **L-Solution printers driver.** Next> Click.
	h.	Finish Click.
	i.	Yes Click if a message asks whether you want to continue installing following a problem.
	j.	OK Click in the target machine's Properties dialog box.

Entering the dimensions and margins
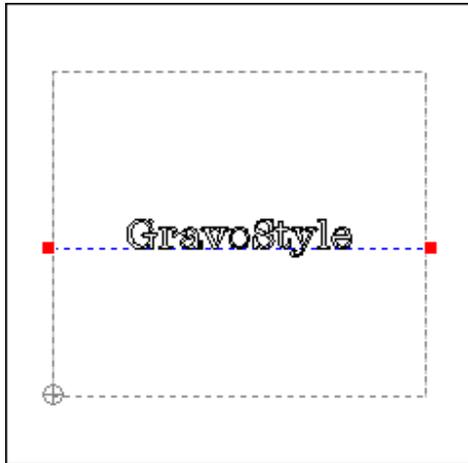
The exterior frame delimits the composition's surface area, in accordance with its **dimensions.**
The dotted frame represents the margins that separate the zone reserved for the text from the border designed to immobilize the plate.

You can customize the color of the composition and the margins.

If the new dimensions/margins decrease the length of a line of text in relation to that of the text typed in, the text will automatically be compressed.

Click the **Dimensions and margins tab** in the Material dialog box.

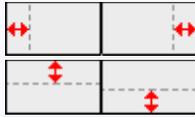| Material's dimensions	**If one of the composition's dimensions exceeds the height of the engraving area, the other has to be less than the engraving area's length (limit of the tool's movement on the X axis).**
	A message will ask you to confirm dimensions selected that are greater than the engraving area's dimensions.
	Yes **Click if you are configuring a composition on a cylinder.**
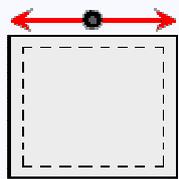
1.   Key in a length no greater than the length of the engraving area.

2.   Key in a height no greater than the length of the engraving area.

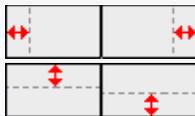3.   Key in a thickness no greater than the depth of the engraving area.

Composition's margins	❗ **If you place the text in manual mode, all the margins will be cleared.**
Proportional margins	Click box ☑ **Margins auto-correction.**
	The left and right margins are each equal to 15% of the composition's length.
	The top and bottom margins are each equal to 10% of the composition's height.
Margins equal to the left margin	1. Click box ☑ **Same margins.**
	2. ⬌ Key in the left margin.
Different Margins	1. ☐ Check that no boxes are clicked.
	2. Key in each margin.
	The distance between the left and right margins has to be between 0.01 mm and the length of the composition.
	The distance between the top and bottom margins has to be between 0.01 mm and the height of the composition.
Customizing the standard dimensions and margins

The default dimensions equal
• the dimensions of the default target machine's area.
• 1,000 x 1,000 mm, if you have not created a target machine. | 1. Click the **Material** tab in the Options dialog box.

2. Key in the dimensions and margins as described above.

Click in the main toolbar to create a blank composition from latest default dimensions and margins. |
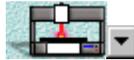
Engraving properties

◁Defining the composition's engraving properties

	1. Click the **Engraving properties** tab in the Material dialog box. 2. Set the engraving properties below. 3. **Check that the composition's configuration is correct.**
	Designate the active target machine which will actually engrave the current composition. Its engraving area delimits the composition's maximum surface area. Cancel Click if there isn't one. **Add this target machine,** and then designate it in the Material dialog box. ⧉ **Designate as default target machine** Click box ☑**Set as default machine** if you perform engraving regularly using the active target machine. The machine selected automatically becomes the default target machine in the **Machines dialog box.** OK When you click to validate your composition's configuration, a message will ask if the default target machine's area has to delimit the maximum surface area for each blank composition. Yes The dimensions of the engraving area will become the **default dimensions** in the **Options dialog box.**
ABC	Designate **the engraving orientation** OO normal or ⊖ rotated.
	Set the **engraving origin** ✛ center or ⌐ upper left-hand corner.
	If needed, set the **parameters for engraving on cylinder.**

Setting the composition's origin

1. Click the **Engraving properties** tab in the Material dialog box.

2. Select the **origin** depending on the composition's position in the engraving area. Click a **fixed** origin (center or left) or on a **floating** origin (center or left).

The composition's origin will become floating when it does not match any fixed origins. This is the case when:
• The plate's footprint does not make it possible to fix it at the center or in the left-hand corner of the engraving area.
• The composition's position on the plate offsets its origin in relation to the center or the left-hand corner of the engraving area.

Machine center

The center of the composition matches the **center of the engraving area.** This fixed origin is recommended for e**ngraving on a self-centering vice.** This accessory makes it possible to center the plate in the engraving area.

Machine's left corner

The upper left-hand corner of the composition matches the **upper left-hand corner of the engraving area.**

Floating center

Key in the **XY coordinates for the center** of the composition in the engraving area (the default value is zero).

Floating left corner

Key in the **XY coordinates for the upper-left hand corner** of the composition. Default settings:
• The X coordinate equals half of the length of the engraving area.
• The Y coordinate equals half of the height of the engraving area.

You can only select a floating origin if the composition's surface area is less than the engraving area.
Check that the floating origin's position does not place the composition outside the engraving area. If this is detected during transfer for engraving, a message displays asking you to correct the floating origin's XY coordinates.

✔**Correct floating origin**

The upper left-hand corner of the composition (red frame) remains within the engraving area (gray surface). The plate (green surface) is fixed onto the upper left-hand corner of the engraving area.

✖**Incorrect floating origin**

The upper left-hand corner of the composition is outside the engraving area.
Only the portion of the composition inside the engraving area will be engraved onto the plate.
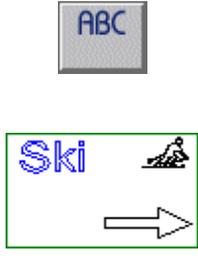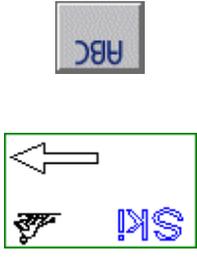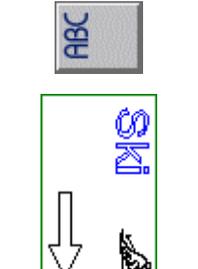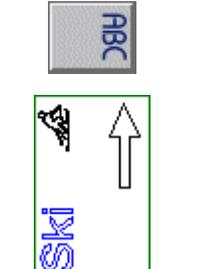
◁Designating the composition's orientation

1. ![icon] Click the **Engraving properties** tab in the Material dialog box.

2. Click the **orientation** suited to the **material** being engraved and the **composition's dimensions.**

Any orientation is possible, provided each dimension is less than or equal to the height of the engraving area.

	❗ The other dimension will not exceed the height of the engraving area.		**90°-rotation** if the **height** of the composition exceeds the height of the engraving area.	
	Normal if the **length** of the composition exceeds the height of the engraving area.			
Upside to directly engrave the material's surface.				
Reversed to engrave materials that have a transparent upper layer (Gravoglas 2).				
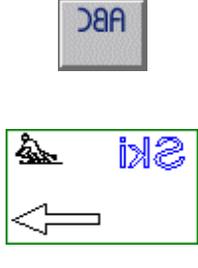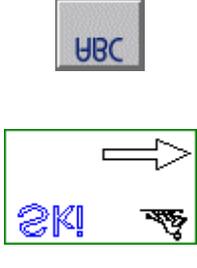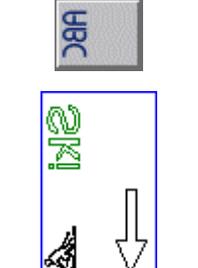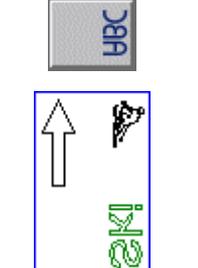
Setting the parameters for engraving on a cylinder

Consult the Gravograph manuals enclosed with your machine and the cylinder engraving accessory.

Set the dimensions and margins.

If one of the composition's dimensions exceeds the height of the engraving area, a message will ask you to confirm dimensions selected that are greater than the engraving area's dimensions.
Yes **Click to configuring the composition on a cylinder.**

1. Click the **Engraving properties** tab in the Material dialog box.

2. Set the composition's **floating origin** (default setting: center). Key in only its X coordinate in the engraving area. The Y coordinate, which equals half the height of the engraving area, remains fixed.

3. Click to activate the **cylinder engraving.**
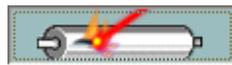
4. Key in the **diameter of the cylinder.**

Cylinder engraving is automatically activated in the L-Solution dialog box

Checking the composition's configuration

1. Configure the composition.

2. Click the **Engraving properties** tab in the Material dialog box.

3. Note the comments in the **Info zone** and act accordingly:

		Your configuration is correct: the composition (red frame) remains in the engraving area (gray surface).
		The composition is physically outside the engraving area. However, its surface area does not exceed the engraving area. ✔ Correct the composition's **orientation** or **origin.** ✔ Configure the composition ● **for cylinder,** if your machine is equipped with this accessory.
		It is impossible to engrave: the composition's surface area exceeds the engraving area in both length and height. ✔ Correct the **composition's dimensions.** ✔ Designate a **target machine** that offers a larger engraving area.
Maximum number of plates		If you are producing a Matrix series, this value indicates the total number of elementary plates that you can engrave in the engraving area according to the standard plate's configuration.

Engraving the composition with an L-Solution machine

» Arranging objects on-screen	Change the order in which objects are displayed to manage superimposed engraving laser paths.
» Assigning a laser path to an object	Decide what procedure the laser beam will follow in order to engrave the object.
» Defining the laser engraving properties	Set the parameters and options involved in the physical execution of the engraving.
» Engraving on a cylinder	The Cylinder Engraving mode allows a composition intended for engraving on a cylinder to be configured.
» Wysiwyre 2D render	Simulate the engraving of the composition in the material of your choice.
» Transferring for engraving	Transfer the composition data from the computer to the engraving machine.

◁Arranging objects

To manage superimposed objects, you can change the order in which they are displayed in the composition. The portions of the objects covered by other objects are ignored during engraving.

Correctly superimposed: text in front of the shape	**Incorrectly superimposed: text concealed by the shape**

ℹ️ **If you paste or move the selection, it is displayed in front of all the placed objects.**

1. Select some objects.
2. Click the command in the Align palette or in the **Modify/Order menu.**
   ✔️Type the hotkey.

Front

`Ctrl` `PgDn` **To place the selection in the foreground**

Behind

`Ctrl` `PgUp` **To place the selection in the background**

Forward

`Shift` `PgDn` **To move the selection forward**

Backward

`Shift` `PgUp` **To move the selection backward**
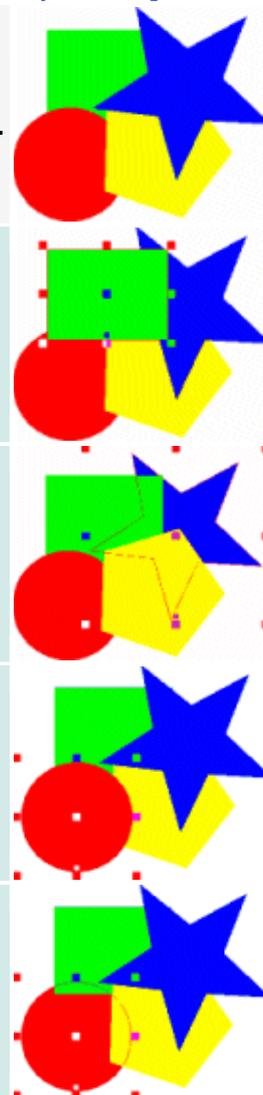
Engraving path

Assigning an engraving path to an object

| **Assigning a tool path**		
GravoStyle 5 by Gravograph G5	1.	Open the **Laser Colors palette:** click in the toolbox. Each color corresponds to a path. Click to use more or fewer colors (4 minimum).
	2.	Define the properties of each path.
	3.	Display engraving paths.
	4.	Group contours by engraving surfaces.
	5.	Select an object or select text.
	6.	Double-click a color in the Machining tools palette. Laser Colors palette.
	7.	Repeat steps 4 and 5 for each object to be engraved.
Defining a tool path properties	a.	Click the **type** of path in the Laser Colors palette.
	b.	**Define the marking properties.** Save these properties.
Displaying engraving paths		Type the hotkey or click the command in the View menu:
		Ctrl + 9 **Graphic mode** to display the surfaces and contours according to the **properties of the path** that is assigned to it (color, fill, line with thickness, vectors).

◀Defining the properties of a laser path

Click the **type** of the laser path and set its **properties** in the Laser Colors palette.

Raster△

The laser beam engraves by sweeping (rectilinear passes). **Click the Raster properties:**	
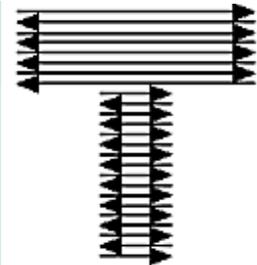
☑Fill The laser beam sweeps the object's surface. Raster Fill is the default path, except for the orange path.	

☑Line The laser beam sweeps the object's contours according to the thickness entered. Key in a **Thickness** that is greater than 0.1 mm (width of the laser beam).	

☑Fill **☑Line** **T**he laser beam sweeps the object's surface and contours according to the thickness entered. Key in a **Thickness** that is greater than 0.1 mm (width of the laser beam).	

☐Fill **☐Line** An object with an undefined path is displayed using a broken gray line and is not engraved.	

Vectors△

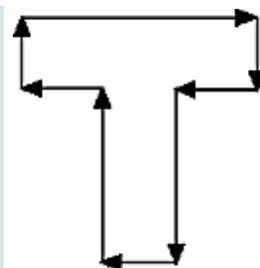|	
The laser beam engraves by following a path centered on the object's contours. Select this path for **Cutting** or precutting. The default setting for the orange path is in vectors.	

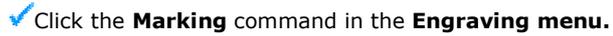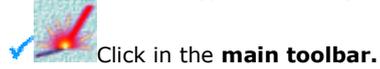|	
☑Precutting The object is displayed using dotted lines.	

Laser engraving properties

Defining the engraving properties with an L-Solution machine

1. Open the **L-Solution dialog box:**

    ✔ Type the hotkey.

    ✔ Click in the **main toolbar.**

    ✔ Click the **Marking** command in the **Engraving menu.**

2. Define the properties involved in the engraving to be executed. You can

    >> **Define the general parameters**

    >> **Define the laser path parameters**

    >> **Define the general options**

    >> **Process a bitmap image**

    >> **Produce a stamp**

OK Click to validate the new properties.

Run Click to **transfer the composition to the machine.**

◁Defining the general laser engraving parameters

Open the L-Solution dialog box.

Material Presets Create a preset to activate the properties specific to engraving on a specific material. Click in the **Presets** list to select a preset (default setting: **Driver).**	1. Set all the engraving properties in the **L-Solution dialog box.** 2. Type the name of the profile. 3. ⊞ Click to add the profile. ⊟ Click to delete the profile selected.
Machine resolution This parameter sets the engraving precision in DPI. **In low resolution (50 to 400 DPI),** you will obtain quick and clean surface engraving. **In high resolution (over 500 DPI),** you will obtain in-depth engraving that is fine and slower.	Select a resolution ▼**DpiX** falling between 50 and 1,200 DPI. ▼**DpiY,** which by default equals DpiX. To increase the engraving speed in high resolution, click box ☐**Fast.**
Origin These coordinates locate the origin of the composition in the engraving area. The default setting is for them to match the top left-hand corner of the engraving area (Origin 0,0).	1. Click to select an origin different from the one chosen in the **Material dialog box.** 2. If you have chosen a **floating origin,** enter its coordinates **X,** distance from the origin to point 0 on the X axis. **Y,** distance from the origin to point 0 on the Y axis.
Plate size	The **Width and Height** entered in the Material dialog box are displayed as an indication. If a dimension exceeds the engraving area, its value will be displayed in red.

Defining the laser path engraving parameters

For each laser path, set the engraving parameters in the **paths table** in the L-Solution dialog box.

The parameters of the path defined in the Laser colors palette are entered in this table.

Set these parameters in accordance with the technical characteristics of your L-Solution machine. Refer to the Gravograph manual enclosed with the machine.

Power expressed in % of the source This parameter defines a power level proportional to that of the laser source.	Key in a value between 0 and 100%.
Speed expressed in % of the maximum speed This parameter defines the speed of the system for moving the machine proportional to its maximum speed.	Key in a number between 1 and 9.
Number of passes for cutting or filling A pass is the equivalent of one passage of the laser for engraving objects. Several passes may be required to gradually reach a given depth (engraving on fragile material).	Key in a number between 1 and 9.
Refocusing This parameter defines the material's vertical displacement to correct the autofocus. Specify this descent or ascent according to the desired engraving depth.	1. Click to activate the refocusing. 2. Enter a negative or positive distance. 3. Click to the left or right of the value to release the autofocus ○ **before** or ⊙ **after** engraving.

Air assistance This flow of air directed onto the laser beam is used to put out flames produced by engraving on certain materials.	1. Check that the air assistance device mounted on your machine is connected to a compressor (see the "Installation" and "Air Assistance Device Requirements" chapters in the L-Solution Machine user manual). 2. ☑Click to activate air assistance.
Marking mode	The **path type** displays:
None	Undefined path: the object will not be engraved.
Raster (active default setting for filling and line with thickness)	Sweeping the surfaces and contours using a width greater than 0.1mm
Vector (active default setting for cutting)	Vectorization of contours
Point (active default setting for precutting)	Vectorization of dotted line contours

◁Defining the general laser engraving options

Open the L-Solution dialog box.

Engraving orientation	Click to select a different orientation from the one chosen in the **Material dialog box.**
Colors reduction mode	⯮ **Processing a bitmap image**
Refocusing	Click to activate the **refocusing** and configure this correction on the autofocus.
Suction Air filtering must always be active so that the smoke produced during engraving can be removed.	1. Click to activate suction. 2. Key in the time delay in seconds between • the start of engraving and starting up suction. • the end of engraving and shutting down suction.
Engraving on a flat surface or Engraving on a cylinder Engraving on a cylinder is automatically activated if you have defined the cylinder engraving parameters in the **Material dialog box.**	1. Click to activate engraving on a cylinder. 2. Key in the **diameter** of the cylindrical part to be engraved (max. of 230mm).
Z up position This parameter, which is measured from the autofocus point, defines the distance over which the material is lowered to avoid coming into contact with the focus carriage during its horizontal movements.	1. Click to activate the clearance. 2. Enter a movement with a minimum value equal to the material's highest relief level.
Producing a stamp	1. Click to activate the function. 2. Click to **generate the stamp shape.**
Wood preset	Click to activate the engraving properties adapted to wood laser marking.

◁Processing bitmap images for laser engraving

This option allows the colors in a bitmap image (photos, drawings, plans) to be corrected to produce the object to be engraved. Depending on its color, each pixel or point in the image on-screen is converted:
• into a pixel in a shade of gray to black to be engraved (each shade of gray is proportional in relation to black).
• into a white, unengraved pixel.

1. Open the L-Solution dialog box.

2. ▨ Click to open the **Bitmap dialog box.**

3. Apply the necessary settings:

 Brightness

◀ ▮ ▶ Key in a percentage between 0 and 100% to darken or lighten the image.

Colors correction mode

 8-shades Grayscale

Click if the number of colors in the image is less than 8. Each color corresponds to a level of gray.

 Automatic Grayscale

This recommended mode converts the image colors into an equal number of grays.

 Halftone

Click to simulate each color using various black and white geometric patterns.

 Negative

Depending on the material used, click to convert the final image as a negative.

By reversing the color of points, this command allows a two-layered material with a light surface and a dark background (for example, Gravoglas white on black) to be engraved.

◁Producing a stamp ^{Option}

This option allows stamps to be created for rubber stamps and badges.

❗ **Key in the actual dimensions of the stamp as the dimensions of the composition.**

1. Place the objects in the stamp:

    a. Create text objects or curve objects.

    b. Convert the text to curves.

    c. Group the objects.

2. Draw the shape representing the cut contour. This closed contour must contain all the stamp's objects.

    ⓘ **You can create the cut contour using offset around the grouped objects.**

3. Draw the shape that represents the mount of the stamp. This closed contour must contain the cut contour.

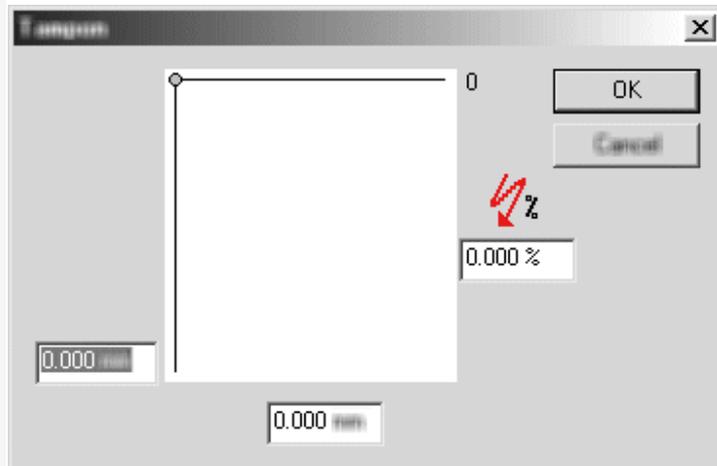4. Click in the L-Solution dialog box.

5. Click to open the **Stamp dialog box.**

6. Adjust the stamp profile (examples):
    ✔Slide the **inflexion point in the preview.**
    ✔Key in the **profile parameters:**
    • distance from the inflexion point to the profile start
    • profile length
    • percentage of the power set for the black color, that places the inflexion point at a given engraving depth

7. Click.

Transfer for engraving

Transferring the composition to the L-Solution machine

Before making the transfer, check that:
• the computer and your machine are correctly connected.
• your machine is powered up.
• your machine is not in the process of making an engraving.
If you have not installed your machine, follow the installation procedure and advice provided in the Gravograph manual enclosed.

1. Select the objects to be engraved (all by default).

2. Open the L-Solution dialog box.

3. Designate the active target machine; choose the machine that is actually going to engrave the current composition.
If there is none, **add this target machine.**

4. **Select paths to be transferred.**

5. **Configure the transfer.**

6. Define the properties for **laser engraving.**

7. Run Click: the progression bar indicates the percentage of data transferred.

   To stop the transfer **Esc**

8. On the engraving machine, execute the pre-engraving settings (consult the Gravograph manual for your machine).

9. Run the engraving from your machine's control panel.

The order of creation and selection of the paths determines the engraving order. In terms of engraving, closed contours are given priority over open contours.

Any modification made to the composition will only apply to the engraving following a new transfer that deletes the previous one.

Selecting the engraving paths to be transferred

1.   Click in the L-Solution dialog box: the **Layers selection dialog box** displays the list of layers containing the objects selected.

2.   Select the paths to be engraved (all by default): key `Ctrl` depressed, click to deselect or select a **Layer.**
`All` Click to select all the paths.
`None` Click to deselect all the paths.

3.   If you select at least two layers, key in the **Engraving delay** between two layers (default setting: 5 seconds).

4.   `OK` Click.

Configuring transfer to the machine

These options determine the conditions under which transfer of the composition takes place once you have clicked $\boxed{\text{Run}}$ in the L-Solution dialog box.

Transfer mode	Click the mode you want.
	⚪**File:** You will save the engraving file in the **DRAWS** so it can subsequently be transferred to a machine.
	Designating another folder
	a. $\boxed{\text{Change}}$ Click. The **Find File dialog box** will open.
	b. 📁Select another folder in Windows Explorer.
	c. [OK] Click.
	⚫**Port:** you will send the composition to the active target machine.
Grouping paths by transfer file	1. [1][2][3] $\boxed{\text{Collate}}$ Click.
	2. Click the box for the type of grouping:
	⚫**By layer** to transfer to a distinct file the paths in each layer.
	⚪**All** layers are transferred to a single file.
	3. [OK] Click.
Managing transfer files	1. $\boxed{\text{Spooler}}$ Open the Windows manager window for the target machine.
If you have carried out several consecutive transfers, you can define their order of engraving.	2. **Right-click** an engraving file.
	3. In the contextual menu, click
	• **Suspend** printing to temporarily interrupt transfer to the machine.
	• **Cancel** printing to cancel the transfer**.**

Index