

L-Solution laser driver



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L-Solution driver installation

Preparation

The laser machine is needed for driver installation. Please prepare connection between PC and laser machine and keep the machine power off.



Caution

- > Before installing the driver, make sure the laser machine is off.
- To install L-Solution driver, administrator privileges are required. Make sure to right-click on the setup.exe and choose "run as administrator".
- If you were using personalized job presets with a previous L-Solution version, it is recommended to do a backup prior to installing the new version. Such presets are typically located in C:¥L_Solution¥Job
- When more than one computer will be used with the same laser machine, make sure to update L-Solution driver to the same version on every computer.
- FineCut 9 requires L-Solution version **7.26-3** or above.

Procedure

①. Browse your PC for the "L-Solution 7.XX-3" folder containing installation files.

If downloaded from <u>https://www.gravotech.co.jp/download_mimaki.php</u> , make sure to extract the ZIP archive locally before proceeding to installation.

If taken from a local installation of LaserStyle software, typically C:¥GravoStyle8000¥DRIVER¥LSolution 7.XX-3, please double check the version number you are about to install.

Inside the "L-Solution 7.XX-3" installation folder, right-click on "setup.exe" and do "run as administrator". When prompt for security, allow the installer to modify system in order to proceed.

		User Account Control X
Win_7		Do you want to allow this app from an unknown publisher to make changes to your device?
Win_8	1	
Win_Vista	1	
Win_Xp		Publisher: Unknown
🔇 setup.exe		File origin: Hard drive on this computer
	Open	Show more details
	Run as administrator	
	Troubleshoot compatibility	Yes No

②. Click "Next" to launch the installation. Note that the communication port type should be left on "USB". The installation process begins by deleting any pre-existing L-Solution driver on the PC. As this may take a few seconds, please wait for completion.

G LSolution Setup 1.36	Solution Setup 1.36
Reminder: Setup.exe must be run as administrator	Reminder: Setup.exe must be run as administrator
Select the port type for the communication with the machine	Select the port type for the communication with the machine
Next	Next

Sometimes the operating system will require you to reboot in order to proceed further with the driver installation.

Please save your work and close all your other applications and do "restart now". Do not do "restart later".

	🔇 LSolution Setup 1.36 🛛 🗙
	Reminder: Setup exe must be run as administrator
Image: The second s	© USB ⊂ Other
You must restart your computer to apply these changes	
Before restarting, save any open files and close all programs.	
Restart Now Restart Later	Next

Let the computer restart normally and log on to your account. Do not launch any application, after a while the L-Solution driver installer should come back automatically. Click "Next" to continue with the installation.

When installing the L-Solution for the very first time on a computer, Windows will ask you for confirmation in trusting the software package and publisher.

Please check the checkbox "always trust software from GRAVOTECH MARKING SAS" and proceed with "Install".



③. The installation continues until "Connect the machine to the port, switch it on" is displayed. At this point, connect the USB cable of the laser machine to the PC and switch ON the laser machine. Windows will detect a new peripheral and the installation will continue automatically.

1 . I.O. I. I. O.					
Colution Se	tup 1.36		×		
Reminder: Setu	up.exe must be run as a	administrator			
a		APPEND THE FORCE			
setup.exe	Open				
	🛞 _Run as admin	istrator			
	Fraublachast	compatibility			
C Select the port	t type for the communic	ation with the machine —			
	🖸 USB	C Other			
> Deleting t	the current driver				
n Inder Patro	for the Westford				
> Initializing	g installation				
> Connect	the machine to the port	, switch it on			(')
				-	
		······			
r	Next	Lancel			

At the end of the installation process, the installer screen automatically closes.

The laser driver is now installed.

To double-check its status, see Settings > Devices > Printers&Scanners.

L-Solution security settings

Preparation

To modify security settings of the L-Solution driver, administrator privileges are required. Make sure to login as a system administrator for this procedure.

Procedure

For system stability and also in order to use the printer with non-administrator accounts, it is necessary to give total permissions on the driver to every users of the computer.

Open the printer properties of the L-Solution printer (start button, settings, devices, printers&scanners, L-Solution, printer properties).

Under the "security" tab, check every "Allow" checkboxes for every user in the list, especially "Everyone". Do "Apply".

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General	Sharing	Ports	Advanced	Colour Management	Security	A propos de	
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🚉 Ev	eryone						
E AL	L APPLIC	ATION P	ACKAGES				
🔜 S-	-1 -1 5 -3 -1	1024-404	44835139-2	658482041 - 31 27973	164-32928	7231-386588086	51-193868564
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						Add	Remove
Permiss	sions for E	vervone				Allow	Deny
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Spec	al permiss	sions				\cup	
For spe	cial permis	sions or	advanced se	ttings, click Advanced.			Advanced
				Г	ОK	Cancel	Apply
					011		2. Arbi A

The laser printer driver is now usable by every user on this PC, including non-administrator accounts.



L-Solution initial settings

Browsing the PC settings (start b	utton, settings, devices, "Printers & scanne	ers"), find the "L-Solution" printer,
click on it and choose "Manage".		← Settings
Then proceed to "Printing prefer	ences".	ه printer name
← Settings		
යි Home	Printers & scanners	Manage your device
Find a setting P	Add printers & scanners	Printer status:
Devices	+ Add a printer or scanner	Open print queue Set as default
En Bluetooth & other devices	-	Print a test page
合 Printers & scanners	Printers & scanners	Run the troubleshooter
() Mouse	₽	Printer properties
🕀 Touchpad	E printer name	Printing preferences
📼 Typing	Open quelle Manage Remove devi	Hardware properties
🖉 Pen & Windows Ink		
စ္ AutoPlay		
Indicate the following informatio Width in X field Height in Y field Model in model field Nominal power in pow	Ver	$\mathbf{ABC} \qquad \mathbf{ABC} \qquad \mathbf$
field It is also recommended to active	ate	
automatic air suction wh	nile 🥠 🦼 👬 🗴 🕮 🛛 Z1	⇒ →
engraving by clicking		v Dpi Y 500 v Dpi X 500 v
Click OK to validate and quit.	ř	OK Cancel Apply

Deactivate automatic machine firmware update

This section shows how to deactivate the automatic machine firmware update performed by LaserStyle software.

Start LaserStyle software and open the options window using F10 key (you can also browse the menu for the "modify options" button.



In the options window, "General" tab, make sure to un-tick the "Automatic machine firmware update" checkbox.

Validate using the green check mark



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Laser machine firmware update

Preparation

> To update the laser machine firmware a PC with a recent L-Solution driver is required.

Caution

- Connection with the machine will be required so please make sure there is a proper functional connection between the PC and the laser machine.
- FineCut 9 requires LS-series' firmware version 4.45 or above.
 Firmware version 4.45 is included in L-Solution driver version 7.26-3.

Procedure

Browsing the PC settings (start button, settings, devices, "Printers & scanners"), find the "L-Solution" printer, click on it and choose "Manage".

		← Settings
Then proceed to "Printer properties".		☆ printer name
		Manage your device
← Settings		Printer status: Open print queue Set as default
命 Home	Printers & scanners	Print a test page
Find a setting	Add printers & scanners	Run the troubleshooter
Devices	+ Add a printer or scanner	Printer properties
Bluetooth & other devices		Printing preferences
日 Printers & scanners	Printers & scanners	Hardware properties
() Mouse	ß	
🖽 Touchpad	E printer name	
📟 Typing		
🖉 Pen & Windows Ink	Open queue M	anage Remove device
AutoPlay AutoPlay	品	

In the "About" tab, click on the laser machine illustration in the middle of the window. Note that you can see the current version of L-Solution which is installed on that computer.

🖶 printer properties	×	afiterproperties 🖶	×
	×	Gravograph 7.26-3	×
Double-sided: No Staple: No Speed: Unknown Maximum resolution: 1200 dpi Preferences Print Test Page	oblà	OK Oancel A	ρρίγ



2 50 2 50 C Réglage tickle C Réglage asymétrie C Réglage alignement C Réglage backlash
2 50 2 1 C Réglage asymétrie C Réglage alignement C Réglage backlash
Réglage tickle Réglage asymétrie Réglage alignement Réglage backlash
Réglage asymétrie Réglage alignement Réglage backlash
C Réglage alignement C Réglage backlash
C Réglage backlash
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arde l'ordre vectoriel 🔲 Apf
min des sauvegardes C:\L_Solution\Job\

Upon reception of the firmware file, the laser machine LCD screen will display "calculating" to indicate it is processing the update.



When finished, the LCD screen will display the usual message "Ready to receive". The firmware is now updated.



Click "Ok" to close this window. The firmware update process is finished.

Laser machine adjustments

Preparation

- Engraving material is needed to perform engraving tests and adjust various settings of the machine.
 There are at most five different tests, so preparing five sheets of engraving material is recommended.
- Test jobs are stored in the L-Solution driver so a PC with the compatible L-Solution driver installed is required. Proper connection between PC and laser machine is needed.

Caution

- > As stated in the general user manual, never leave the machine unattended when engraving.
- Select the power setting wisely depending on the material to be engraved and the nominal power of your machine.

Procedure

When updating the laser machine's firmware, it is recommended, though not necessary, to verify the machine's adjustments.

There are up to five different tests (depends on the machine model and firmware/driver versions):

- 1. Asymmetry adjustment
- 2. Alignment adjustment
- 3. Focus adjustment
- 4. Tickle adjustment
- 5. Backlash adjustment

These adjustments are accessed via the "About" tab in the "Printer Properties" of the L-Solution driver.



The following pages will guide you quickly through each procedure. For more information, please refer to the L-Solution driver manual.



1 Asymmetry adjust Asymmetry adjust

Used to adjust the alignment of vertical lines in raster mode (back and forth). This adjustment is performed at slow speed.

- 1. Select:
 Asymmetry adjust
- 2. Adjust the power according to the material to be engraved.
- 3. Click on: Asymmetry adjust



1/2 50		Agnmenty adjust	
24 34	0	Algement adjust	
	0	Focus adust	• • _
	0	Tickle adjust	
	0	Backlash adjust	

A test file is sent to the machine.

4. On the control panel of the machine: press the key:

13 rows of vertical lines are engraved (0-12).



5. L-Solution driver: select the row number with the best alignment of points.



2 Alignment adjust Alignment adjust

Used to adjust the alignment of vertical lines in raster mode (back and forth). This adjustment is performed at rapid speed.

- 1. Select: Alignment adjust
- 2. Adjust the power and speed according to the material to be engraved.
- 3. Click on: Alignment adjust



A test file is sent to the machine.



13 rows of vertical lines are engraved (0-12).

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	and the second se

- 5. L-Solution driver: select the row number with the best alignment of points.
- 6. Click on: Apply
- 7. Click on: OK

3 Focus adjust Focus adjust

Used to fine-tune the focal point.

- 1. Select:
 Focus adjust
- 2. Adjust the power and speed according to the material to be engraved.
- 3. Click on: Focus adjust



A test file is sent to the machine.



- 5. L-Solution driver: select the row number with the best rendering.
- 6. Click on: Apply
- 7. Click on: OK

4 Tickle adjust Tickle adjust

Used to set the excitation threshold from the source to the marking point.

Do not change these values unless instructed to do so by a Gravotech technician.

5 Backlash adjust Backlash adjust

Used to correct XY mechanical play by applying a position correction at each change in the direction of travel. This setting is particularly useful for the correction of unclosed shapes.

- 1. Select: Backlash adjust
- 2. Adjust the power and speed according to the material to be engraved.
- 3. Click on: Backlash adjust



		Load firmware	1	
	0	Asummenu adjust	1	
1× 3	0	Alignment adjust	í	
2 10	0	Focus adjust	X- 6 Y- 6	 Apply Apply
	O	Tickle adjust]	
		Racklash adjust	1	

A test file is sent to the machine.



2 x 13 squares are engraved (0-12).



- 5. L-Solution driver: select the row along X and then along Y where the alignment is better.
- 6. Click on: Apply
- 7. Click on: OK

Uninstalling L-Solution driver

C - 11

- ①. Click on the windows icon in the bottom left corner of the desktop to then access the settings menu.
 Proceed to "Devices".
- 2. Under "Printers & scanners", find the "L-Solution" printer, click on it and choose "Remove device".

 Settings 							
命 Home	Printers & scanners						
Find a setting	Add printers & scanners						
Devices	+ Add a printer or scanner						
Bluetooth & other devices							
品 Printers & scanners	Printers & scanners						
() Mouse							
🖬 Touchpad	E printer name						
I Typing	Open queue Manage Remove device						
🖉 Pen & Windows Ink	open queue Manage Reniove device						
0							

③. When prompted for confirmation, proceed with the suppression by clicking "Yes".



This printer has been removed. If there were multiple copies of the "L-Solution" printer, make sure to delete all of them.

After removing a printer, it is recommended to reboot the computer.

Bluetooth, printers, mouse

When the printer cannot be removed, it is usually because printing jobs are still stored in the printing queue (spooler). Follow these instructions to empty the spooler:

(1). Under the desired "L-Solution" printer, open the printing queue with "Open queue"

← Settings							
டு Home	Printers & scanners						
Find a setting	Add printers & scanners						
Devices	+ Add a printer or scanner						
Bluetooth & other devices							
日 Printers & scanners	Printers & scanners						
() Mouse							
Touchpad	E printer name						
📼 Typing	Open queue Manage Remove device						
d∕∂ Pen & Windows Ink	Open queue manage Remove device						
	品						

②. On each document still present in the queue, right-click and do "Cancel" to suppress them.

🗢 printername					_		×
Printer Document View							
Document Name	Status	Owner	Pages	Size	Submitt	ed	
Dialogue file							
Pause							
Restart							
Cancel							
Properties							
<							>
Cancels the selected documents.							

③. If prompted for confirmation, authorize the suppression.



④. When all documents have been deleted from the printing queue, start again from the beginning of the uninstallation procedure to uninstall L-Solution.

How to display installed printers

Windows 10

Click on the windows icon in the bottom left corner of the desktop to then access the settings menu.

Proceed to "Devices"	← Settings							-		×
				Windows S	Settin	gs				
Settings	Di Di	ystem splay, sound, notifications, ower		Devices Bluetooth, printers, mouse		Phone Link your Android, iPhone		Network & Internet WiFi, flight mode, VPN		
	Ba co	ersonalisation ckground, lock screen, lours		Apps Uninstall, defaults, optional features	8	Accounts Your accounts, email, sync, work, other people	色 A字	Time & Language Speech, region, date		
	S Ga Ga	aming ame bar, DVR, broadcasting, ame Mode	Ģ	Ease of Access Narrator, magnifier, high contrast	8	Privacy Location, camera	C	Update & Security Windows Update, recover backup	ý,	
	Se La	earch Inguage, permissions, history								

Under "Printers & scanners", all installed printers are listed.

	← Settings							
	命 Home	Printers & scanners						
	Find a setting	Add printers & scanners						
	Devices	+ Add a printer or scanner						
	Bluetooth & other devices							
\langle	Printers & scanners	Printers & scanners						
	() Mouse							
	🖬 Touchpad	E printer name						
	📼 Typing	Open queue Manage Remove device						
	🖉 Pen & Windows Ink							
	0							