



**Link  Motion™**

**by Solustan, Inc.**

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# User's Manual

November 16, 2011

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7. LinkMotion driver software is protected with a software protection key. The protection key is tied to your specific PC computer using appropriate Microsoft Operating System. If the technology was not available to transfer the license to another PC, **you will be required to buy another license at a full price** of the software in case of a PC failure beyond normal repair. **It is very important to safeguard the PC with the license.**

8. LinkMotion driver software you purchased can also protected with optionally available hardware ID (dongle) key. If the ID key fails for some reason, you could return it for replacement. As long as Solustan can identify the key to be the one issued by us, **we will replace it for a fee.** On the other hand, if you lose the key, you will be required to buy another license at a full price of the software. **It is very important to safeguard the ID key.**

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# **LinkMotion Detail Installation and Setup Instructions**

## **Computer Requirements:**

**Windows XP with Service Pak 2 or higher and Microsoft .NET 2.0 Framework installed,**

Processor speed of at least 800 Mhz, Minimum RAM memory 512 MB, or 1 GB preferred,

60 MB of Hard drive free space, Screen resolution of at least 800 x 600,

Com port or Parallel port or USB port (This is dependent on your Engraving machine how it is built to communicate with computer)

CD-ROM drive is not required, if the driver software was down-loaded from the web site.

CD-ROM drive is necessary, if the software was received on a CD.

Microsoft .NET 2.0 Framework is available for a free download from the following site:

**Microsoft.com>Downloads & Trials>Download Center>.NET Framework Version 2.0 or Higher.**

## **Installation required for LinkMotion for HPGL Engraving Machines:**

**Part 1 - Installation of LinkMotion driver** software for HPGL controller Engraving machines.

**Part 2 - Software License Code procedure** is necessary for full working license.

When you install the LinkMotion software on your computer it is good for 30 days or 30 executions.

Within this period you need to get a license code from Solustan to make it a permanent license for the computer of your choice. **Please make sure and install on the computer that you are planning to use for long term. All LinkMotion product Licenses are non-transferrable.** Price is subject to change any time. Additional software licenses can be made available for an extra charge.

**Part 3 - Installation of Fonts** is necessary and provided to the customers who bought engraving fonts.

## **Part 1 - Installation Procedure for LinkMotion HPGL engraving driver version 2.7 or higher:**

Note that you must have administrative privileges on the computer in order to install LinkMotion. Most of the installation process is self-explanatory with following screens. You can stop the installation at any time by clicking "Cancel".

**If you have received the driver software on a CD then follow steps from (1A). If you have downloaded from the web then go to step (1B).**

**(1A) Insert the LinkMotion installation CD into your CD-ROM drive.** If the Auto-run feature is enabled, Windows will start the Installation automatically. If the Auto-run feature is not enabled, browse the CD drive in Windows explorer and double-click on the "Launcher.exe" and installation will begin.  
or

**(1B) After downloading, unzip the files and save them by creating a folder name LinkMotion.** Now double click on the file name **Setup.exe or Launcher.exe** and installation will begin.

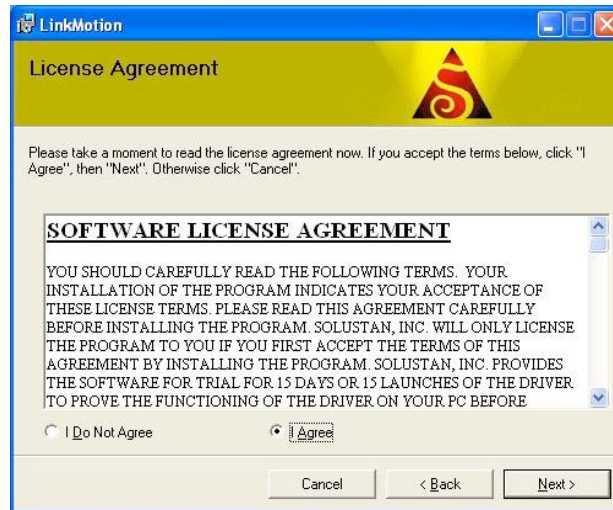
**(2) Click on the Next Button.**



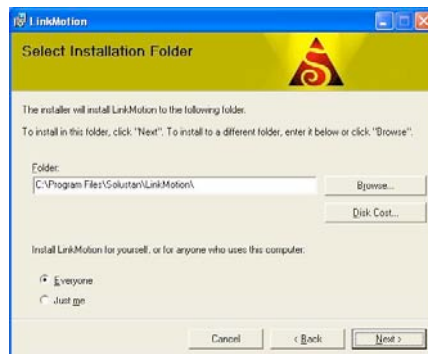
**(3) Click on the Next Button.**



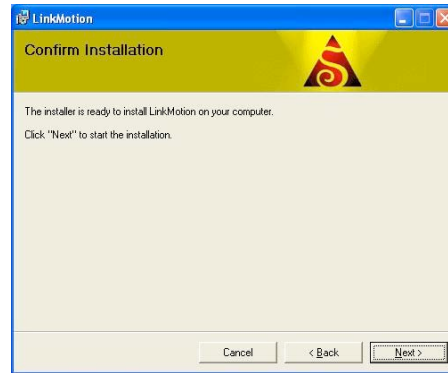
(4) When you get to the License Agreement dialog (see above), **you must read the agreement. If you agree, go ahead and click the radio button, "I Agree" for the installation process to continue. Then Click on the Next Button.**



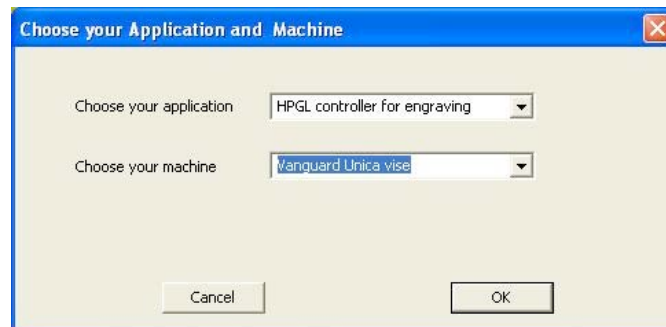
(5) After you have read and agreed to the License Agreement, you will be asked to specify the installation folder. In most cases you can leave this at the default value. You will also be asked to specify who will be able to run LinkMotion on this computer. In most cases you should specify **"Everyone"** and then **Click on Next button.**



(6) Click on the Next button once again.



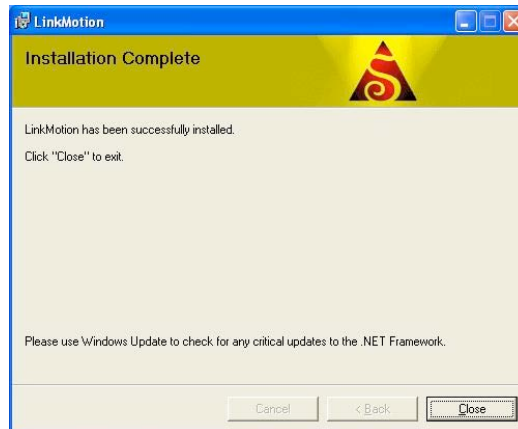
(7) Later during the installation you will see **Choose your application and Choose your machine** for installation. Application name is **HPGL Controller for Engraving** and machine is **Vanguard Unica Vise**. Name of the machine is shown as an example and if you click on the scrolling arrow on the right you should see many more machines listed. If you do not see the name of your machine then it is easy for us to include once we have proper information from you with specifications of your machine.



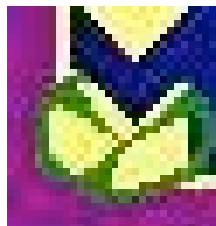
(8) During installation, if a dialog pops up warning you that you are installing an untested driver, **click on "continue anyway"**. This warning will be removed in a future release.



(9) Click on "Close" when the installation is complete.



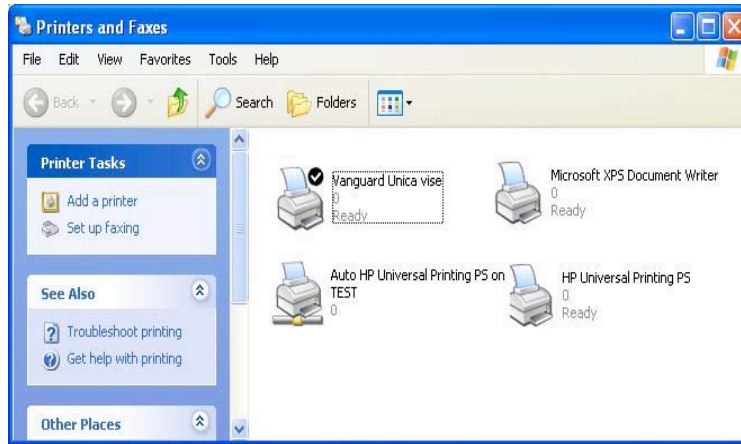
Icon shown above should show up in system tray at the bottom right.



#### (10) Setting up the Default Printer:

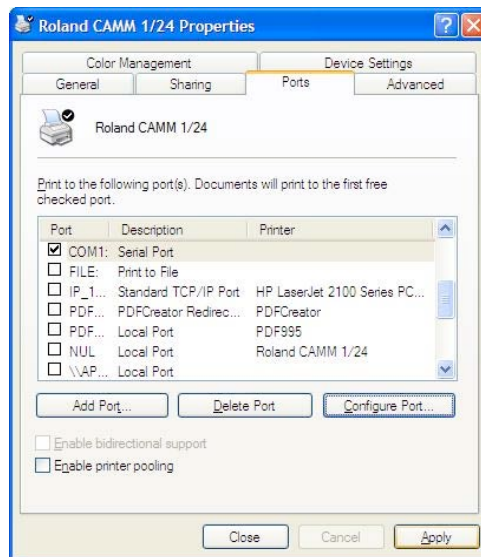
You want the LinkMotion printer to be your default printer. Go to the Start button and open the "Control Panel>Printers and Faxes" menu and find the **printer driver with My Machine-USB** name as shown in the picture below. **Right click on this printer and select "Set as Default Printer"**.



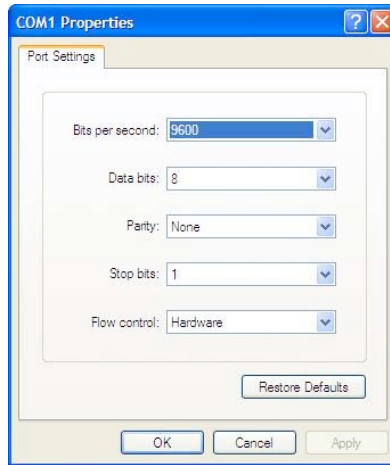


### (11) Post-installation setup and configuration:

For all HPGL Engraving machines you must tell the **printer driver which port the machine is connected to.** (LPT or COM Ports) Usually this will be one of the parallel or serial ports. To set up the printer driver, open the "**Control Panel>Printers and Faxes**" menu and find your **printer with Your machine name**; right click on this printer and select "**Properties**". **Select the "Ports"** tab and select your port. Our installation is on Nul port but you can change to Com or Parallel port where you have connected your machine.



Don't forget to configure the com port for the proper **baud rate, data bit, parity, stop bit and Hand Shake information** that is necessary. Parallel port does not require this kind of settings.



**(12) International Customers need to check following:**

If you are using Windows operating system for other languages please make sure that following settings are selected for LinkMotion to work properly.

**Win XP:** Go to the **Start button > Control Panel > Regional and Language Options > Click on the Customize button**. Here Decimal Symbol should be **.(Full stop or Period)** selected. Do not select **,(Comma)**. If you had to change **click on the Apply button and Click OK**.

Installation and setups are complete.

Now refer to **Using LinkMotion** and the design application you are using and how that works with **LinkMotion and Popular Applications**. Document names are as following:

LinkMotion and Corel Draw

LinkMotion and Illustrator

LinkMotion and Auto Cad and More .....

## **Uninstalling LinkMotion:**

### **Please make sure of the following before you uninstall:**

Your specific machine related settings are saved as **LinkMotion.ini** file. This file can be **saved** from **General Options Menu** and simply click on the **Save button** and give whatever name you prefer. You can also navigate where in your hard drive you want to save it. Different users can save under different names. Similarly you can **Load** that file back after another installation of LinkMotion by going to the General Options menu and clicking on the **Load button**. Navigate to the file from your computer where you saved it earlier. Restore Default button allows you to load default installed INI file that is supplied with LinkMotion. **It is very important to exit LinkMotion applet and Re-launch the applet when you make any changes for it to be effective.**

### **Uninstall LinkMotion Procedure:**

Make sure the LinkMotion applet is closed. Open the **Start menu** and select the **Control Panel**. Double-click on **Add or Remove Programs**. Look for LinkMotion entry in the list and click on that. Select **"Remove"** and answer **"Yes"** when it asks you if you really want to remove LinkMotion.

**LinkMotion.INI file (configuration file) does not get deleted with uninstall procedure. If you want to delete your existing INI file following is the procedure:**  
In the hard drive Find folder name **Document and Settings> Folder with users (your own name) name> Folder name Application Data> Folder name Total Graphics Network> Folder name LinkMotion> LinkMotion.INI**. Delete this file.

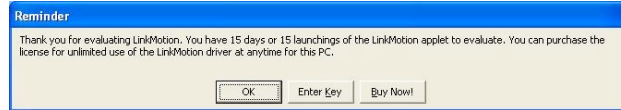
### **Re-Launch LinkMotion:**

**It is extremely important to Re-Launch LinkMotion if you replace or change LinkMotion.INI file for it to be effective.**

**Exit the LinkMotion (icon) applet by right mouse click from the systems tray at the bottom right. LinkMotion icon should go away from the systems tray.**  
**Now launch it back again by following and selecting the path Windows Start button>Program Files>Solustan>LinkMotion by the arrow of your mouse.**  
**LinkMotion icon should appear again in the systems tray at the bottom right.**

## **Part 2 – Software License Key Procedure:**

We welcome you for trying out our LinkMotion driver software. You will see the following message on the screen when LinkMotion is launched from the systems tray every time when you are using the program as demo.



Click on the **Enter key** button, whenever you decide to purchase or you have purchased it and you are ready for full license key. Enter Key will open following dialog box and show the **Hardware fingerprint** of your computer.



You need to provide us the proper information for **Hardware fingerprint, Business Name, valid email for Business along with the LinkMotion version and operating system you are using**. Fill out this information in each respective boxes, save the file and email it to us at [support@solustan.com](mailto:support@solustan.com). **Solustan is not responsible for any incorrect Hardware fingerprint code you provide. Please double check this information before you send it to us.** Software license working with Hardware fingerprint and matching code provided by Solustan, Inc. is intended to work only on the computer with the proper hardware fingerprint. **Key Code will not be generated for any incomplete information.**

**All LinkMotion product licenses are non-transferrable. User will need to buy another license for another computer. Additional license can be made available for an extra charge.**

### **Hardware fingerprint:**

**Name: (Business name or Computer user's name)**

**Valid email for Business or User:**

**Your Operating System:**

**Win 7 64**

**Win 7 32**

**Win XP**

**Your LinkMotion Application:**

**LinkMotion USB Laser**

**LinkMotion USB**

**LinkMotion Lite**

**LinkCAM M&G**

**LinkMotion VC-Laser**

**LinkMotion VC**

**LinkMotion Galvo**

**LinkMotion HPGL Eng.**

**LinkMo HPGLVinyl**

**LinkMotion USB and LinkMotion Lite users need to verify Serial number of the USB controller card.** Launch your LinkMotion application and select the Help tab(menu). Last thing at the bottom right it displays the serial number for the USB Controller. Please write this serial number in the box below.

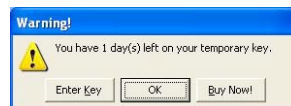
**USB Controller Serial Number:**

After you send us all of the information in above boxes, we will send you the customized Key Code. This key code is long text containing numeric numbers as well as alphabet letters.

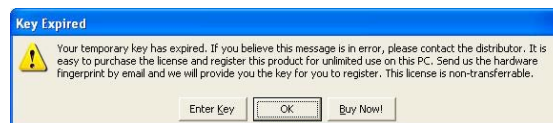
**Key: (Key Code for LinkMotion License)**

**We highly recommend that you simply copy and paste this in the Key section by bringing back the same Enter Key screen. Click OK and you are ready to use your LinkMotion driver software license.**

If you did not purchase within 30 days or 30 launchings you will see a last reminder as seen in the following picture. It will be best to purchase at this point.



Once the trial period of LinkMotion expires, you will see the following message.



Click on the **Enter key** will always give you the Hardware Fingerprint and you can purchase the software any time if you were using the trial version.

### **Part 3 - Install Engraving Fonts: (Rotary Engraving machine users only.)**

Although, any TrueType font can be engraved under the LinkMotion application, Solustan provides traditional engraving fonts. All the engraving fonts are not only designed as TrueType fonts but they are also designed such that engraving bit does not lift up to finish any alphabet character once it starts. We call them Non Lift Fonts. It will engrave faster and smoother. Multi Line fonts are designed and Optimized to work with 0.5 inch or higher sizes.

Optional Fonts provided with the LinkMotion driver software has the folder name **MaxFonts (Basic Fonts)**. **Fontpak** is the optional fonts and you will see this folder only if you have purchased optional fonts. Customer using Braille option should see a folder name **Braille Fonts**.

**Make sure there is no application launched before starting to install the fonts.**

**(1A)** If you have not removed your CD LinkMotion Installation you can move to the next step. If the CD was removed you need to put CD back into the CD drive. It will start installing again and you need to click cancel for automatic Installation.

OR

**(1B)** If you received this by internet when you unzip the software you should see appropriate fonts folder names as described earlier.

**(2)** Now go to the **Control Panel**. On the left side on the top you will see **Switch to Classic View**. Click on it. Select **Font** folder from the list of items you see on the right side.

**(3)** Select **Install New Fonts** from the **File** menu.

**(4)** Under **Driver** section select **Your CD drive** (D or E) if you received the software on CD or your **hard drive C** if you down loaded the software from internet.

**(5)** Under **Folder** section open **BasicFonts(MaxFonts)** folder. Select all fonts from the **List of Fonts** on the top and Click **OK**.

**(6)** You are done with the Installation. If you have purchased other optional fonts you can install them in the same way.

Please follow the keyboard layout pictures to enter proper text from each keyboard layouts shown in the **Fonts section** of Manual.

## **LinkMotion for HPGL Controller Engraving Machines:**

The LinkMotion driver comes with a small application that resides in the System Tray. The System Tray is the lower right bar of the Windows screen. **Double click on the LinkMotion icon** to bring up the application.

**Your computer should have Windows XP operating system with Service Pak 2 (SP 2) and Microsoft .NET Framework Version 2.0 installed, one USB 2.0 port and Com connection for your engraving machine. SP2 and Microsoft .NET Framework Version 2.0 or higher are available from Microsoft's web site for you to download freely:**

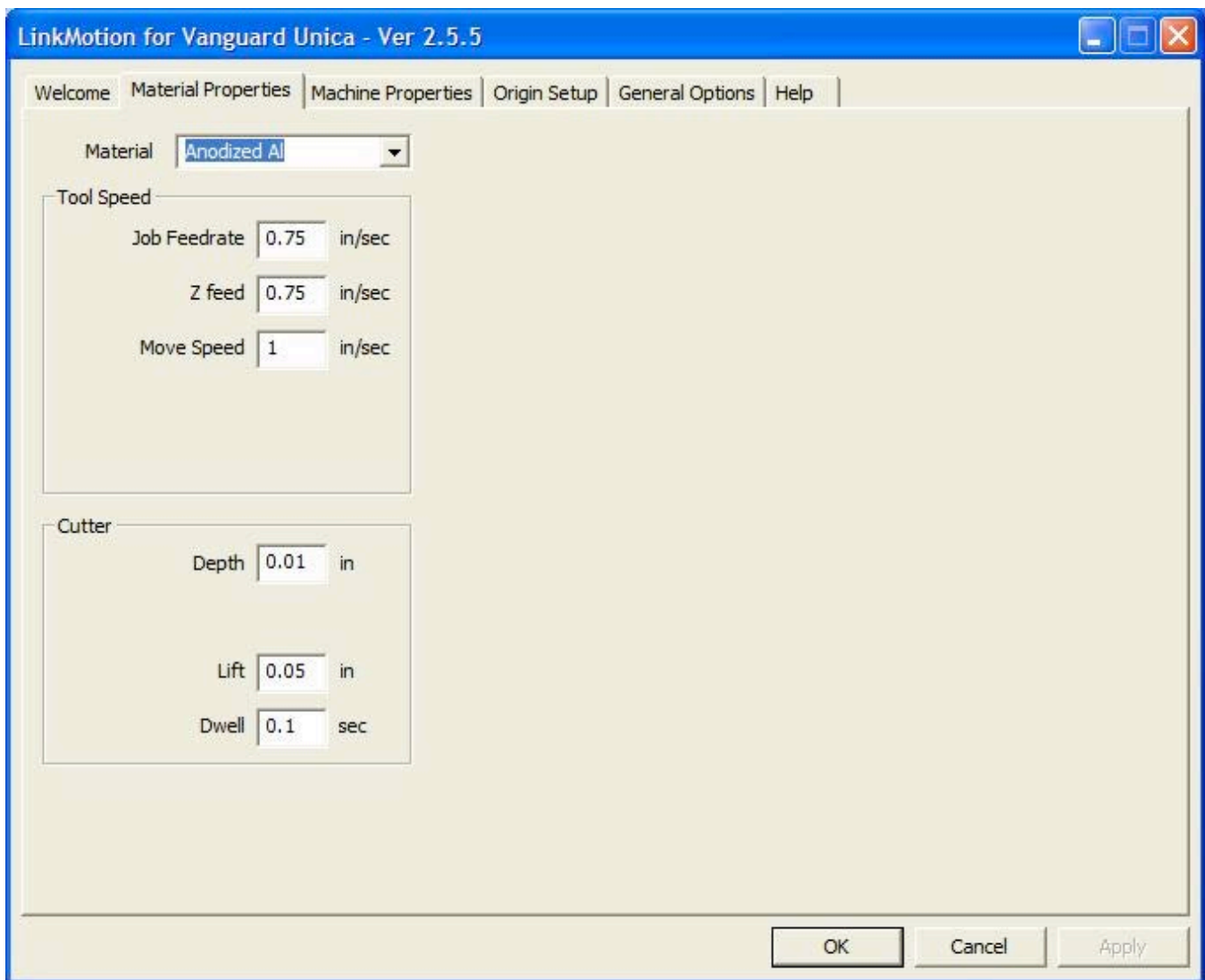
**Microsoft.com>Downloads & Trials>Download Center>.NET Framework Version 2.0**

**Install LinkMotion following the instruction that you received with your LinkMotion CD. First part of the installation may be for LinkMotion I.D. Key driver (If you bought hardware key option) and the second part will be the LinkMotion driver application. Make sure to select proper application and your machine name during the last part of the LinkMotion installation.**

**Linkmotion for HPGL Engraving application you need to go to Printers and faxes in windows control panel and select printer (Name of your machine) with right mouse click and select this to be the default driver. Select Properties with right mouse button. Go to ports. Here select the Port where you have connected your machine. It can be LPT1, LPT2 or Com1, Com2. In case you are selecting COM ports, Set up all parameters like Baud Rate, Handshake, Parity etc. as specified by your machine manufacturer and Apply. Now go back to the port you selected and apply again. You are done with basic installation settings.**



## Materials Properties:



## Materials:

Pull down the **Material Properties menu** to observe a selection of various materials. Pre-select the values of speed and cutter **depths and lifts** for each of the materials. The default values are simply that. LinkMotion can be employed to work with many different types of machines. Hence, there is no single value appropriate for all different machines. User's experience will dictate the values for his/her machines. **Dwell** value should be declared as zero for a motorized Z axis. You may need to declare a value for dwell for Zaxis if your machine's Z axis is air controlled for its movements.

The values can be inches per second or millimeters per second or centimeters per second. General Options menu allows you to make your selection for this measure of units.



**Job feed rate** is the speed when the tool is engaged into material and engraving the job.

**Z feed** is the speed at which Z axis moves.

**Move speed** is the speed when the tool is retracted and the **machine is moving to the next shape** after finishing the previous one.

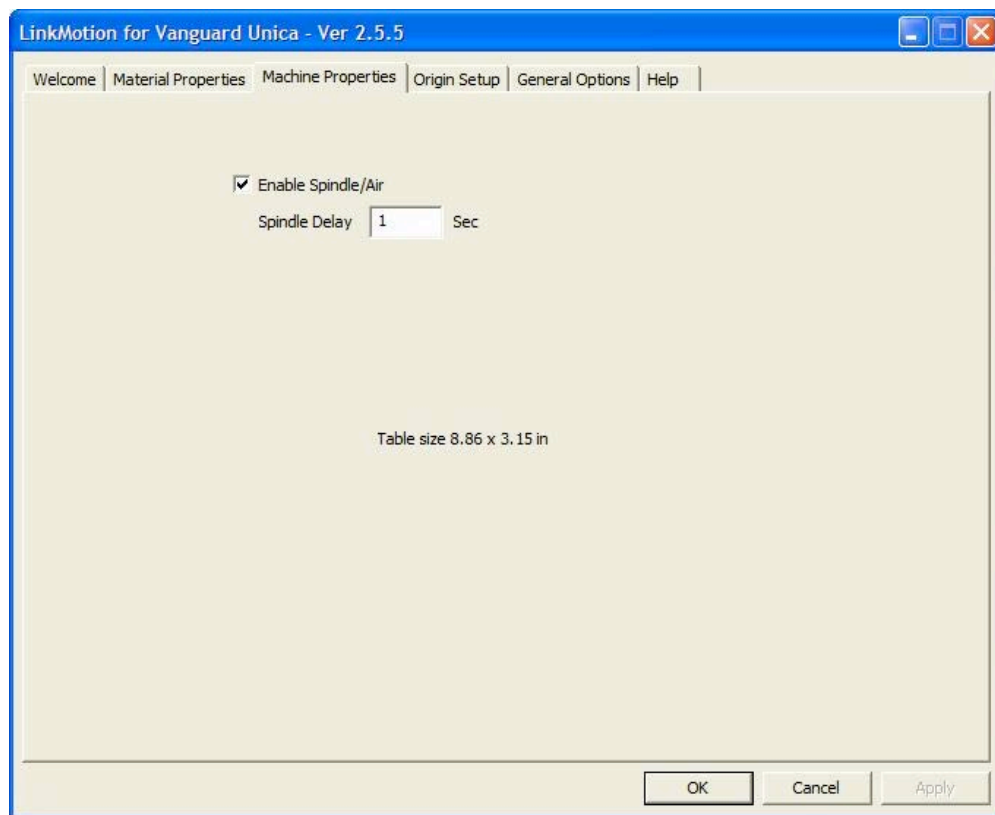
### **Cutter:**

**Depth** is the value declared for tool to travel in the material. Once the top of the material surface is determined, **depth** value controls the movement of the tool in the vertical axis.

**Lift** is the value for tool to lift between the shapes to do the job. If you have several inches of travel available for Z axis then it saves time to declare a lift value where it does not travel all the way up for Z axis between the shapes and instead it travels only by the Lift value and saves time.

**Dwell** is the amount of time in seconds and fraction of seconds the tool will stay at the same position in the material before making X, Y move and after finishing the shape to cut the material.

## Machine properties:

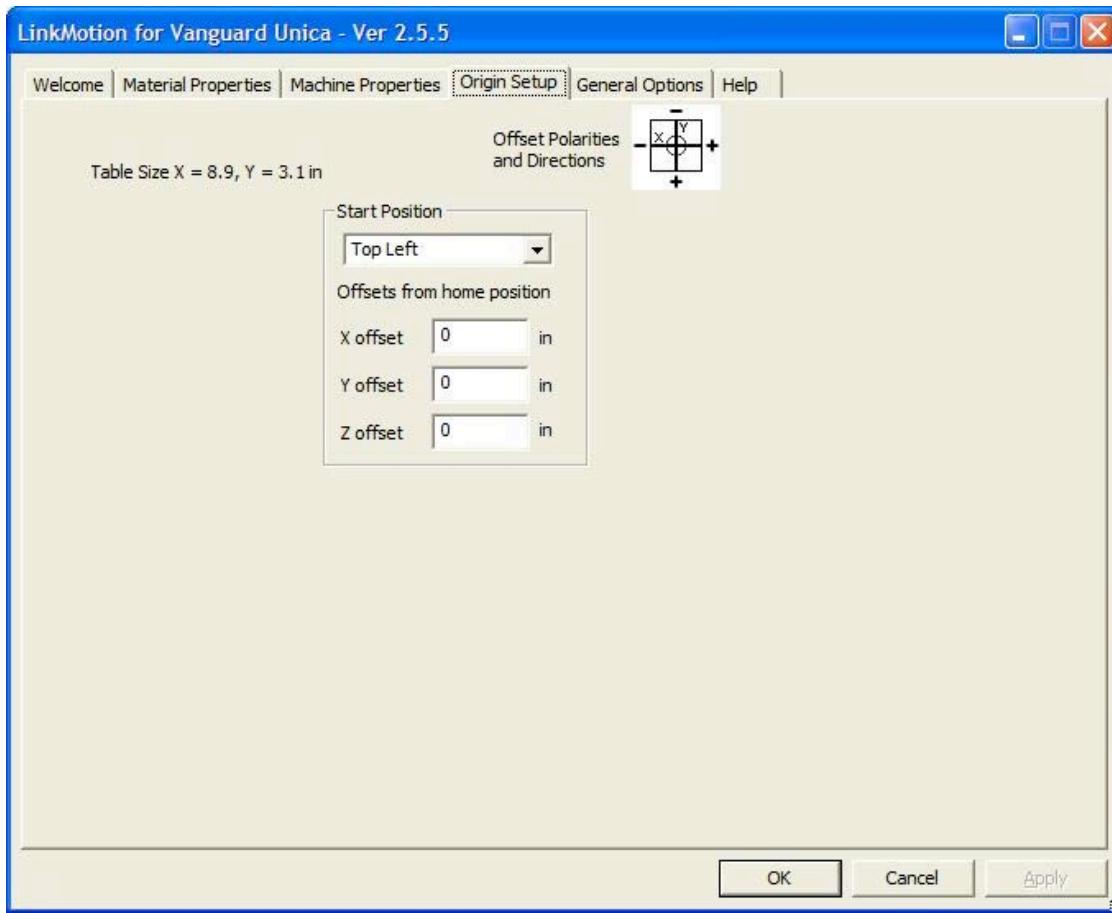


If **Enable Spindle/Air** is checked, it will turn on and off with the job execution. The value of delay can be entered in **seconds and fraction of seconds in the Spindle Delay area**. This delay value will allow the spindle motor to reach its speed before the tool plunges into the material.

Please, beware that some machines do not offer commands to turn spindle on and off using the software. In such case, operator needs to make sure and turn spindle on or off manually as required.

**Engravable area also known as table size is declared here and in the Origin Setup tab. When your screen page size is the same as the engravable area and your selection of starting position corresponds with the actual tool position, the job will be engraved exactly where you design on the screen page. User should follow proper instructions for different design applications provided on the support section of our web site. Remove of bitmap fill and Hairline or zero line thickness of your text or graphic object is necessary for proper output to your engraving machine. However, you can fill enclosed shapes using contour fill routines, if required.**

## Origin Setup:



### **Start Position:**

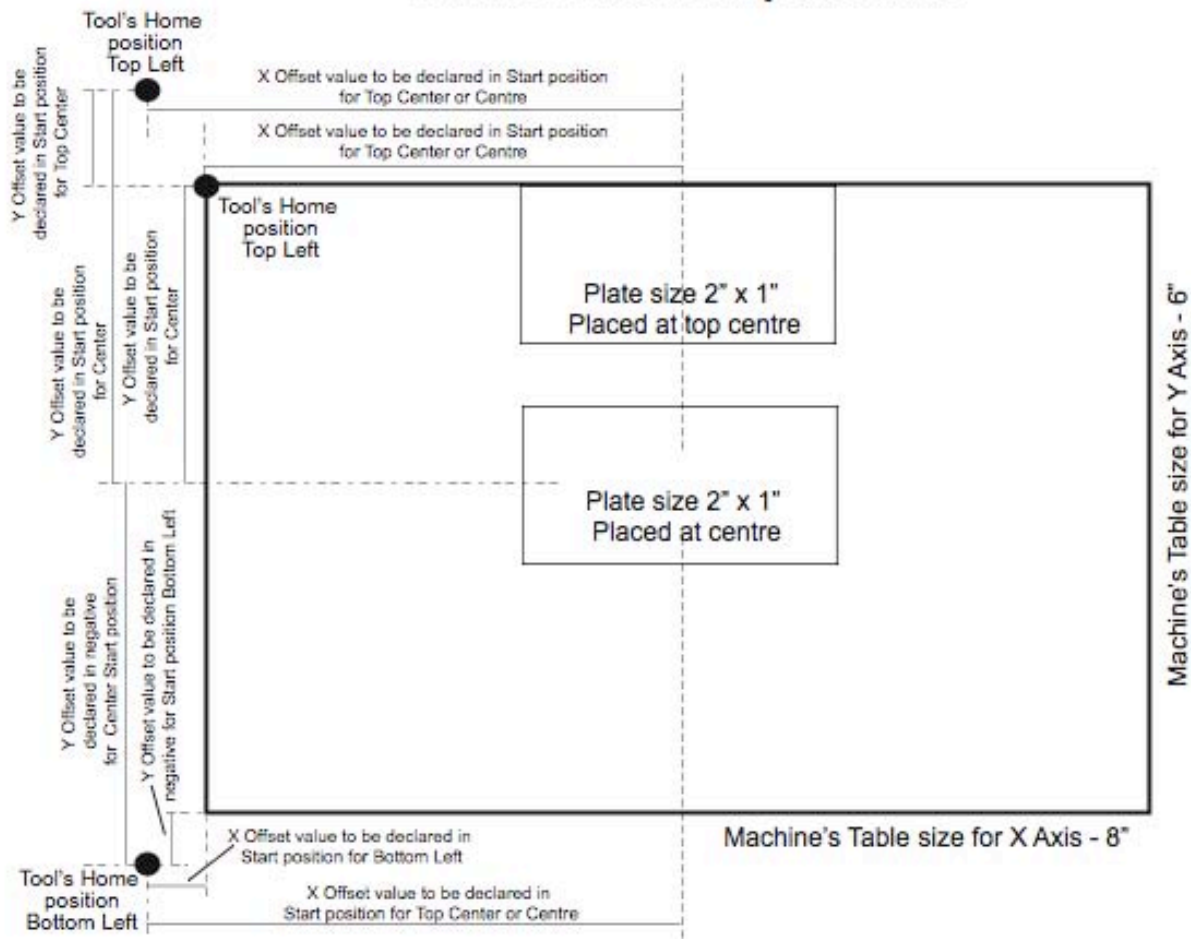
**Bottom Center, Bottom Left, Bottom Right, Center, Top Center, Top Left and Top Right** are the choices.

#### **Job start position may be,**

- Where the jig is positioned (Home Position)
- **Center of a machine in case of a vise type machine** with offset values in X and Y where both jaws move
- **Top center of a machine** with offset value in X only in case of a machine where only bottom jaw moves

In above situations and others, it is necessary to select **Start Position** and declare offset values for X and Y appropriately. Also see the diagram on the next page.

## Start Position Explanation



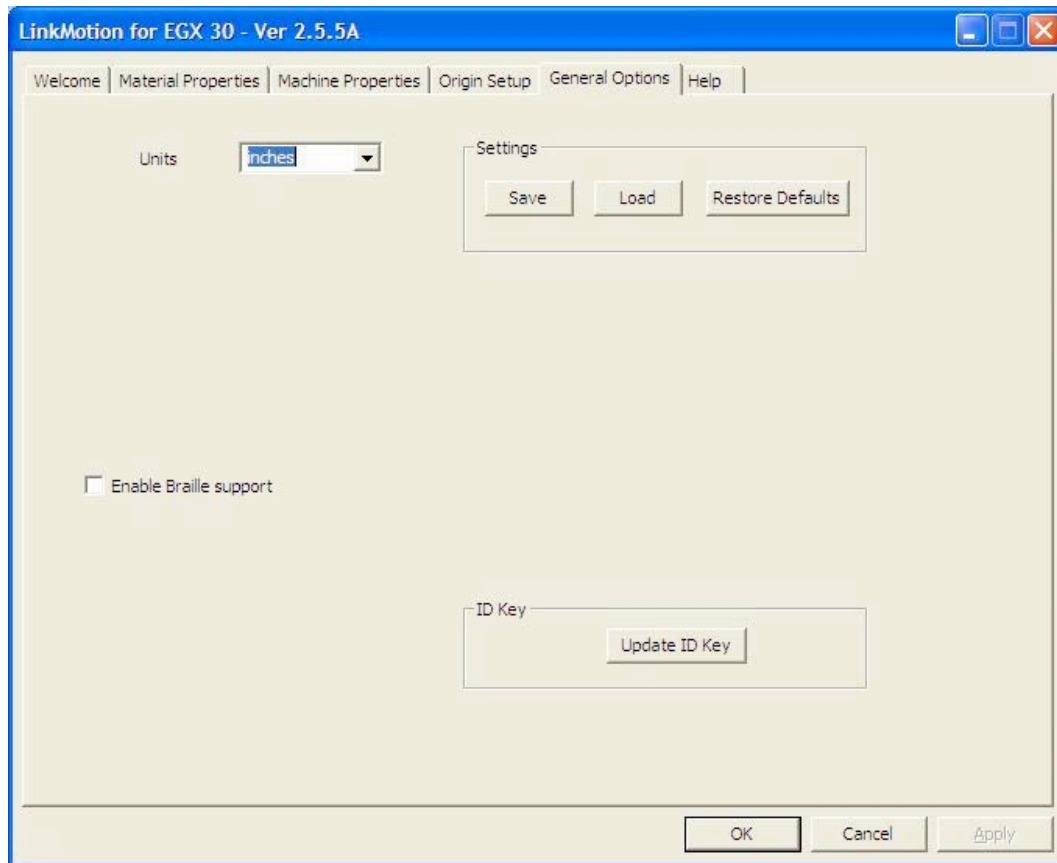
Three different Home Positions are shown in the above diagram. Top left away from the table, Top left at the corner of the table and Bottom left away from the table. Home Switch Position values for X, Y and Z offset are the values where you want to park the tool after it senses the home switches and parks away from those switches. Start position offset values are shown in the diagram above after you have parked the tool.

Start position offsets are declared when you use Top Centre or Center to be the Start position. Above diagram explains how to setup design output in relation to your selection of Home Switches Position and Start Position in Origin Setup of Linkmotion. It is extremely important to understand that Table size and the page size in your design software should be the same in order to get the output in proper location. If you select start position also to be top left or bottom left you need to declare only the distance between the tool's position and where the table begins.

If your machine is designed to use other home position for parking of the tool then measure the distance from those location and decide the proper values to declare in positive or negative numbers in the origin setup accordingly.

If you are using engraving design software where design is done in actual plate size then it is better to declare your table size to be same as your plate size and re-launch your design software to get the proper output in proper location.

## General Options:



### Units:

There are just a few things in the General Options screen. **Units of choice can be selected from inch, mm, or cm.**

### Enable Braille support:

**Enable Braille support** is an **optional feature** and it is designed to drill dots. This is used for creating Braille signs. **Adot is the font** we provide when Optional Braille support is purchased. Selecting this option makes your tool travel to the **begin point of each shape** and go down to create a mark or a hole and go back up and go to the begin point of the next shape.

### Save Settings:

#### **Save:**

**Once the machine is properly configured and is working well, it is advisable to Save the settings on the hard disk drive. This is saved as LinkMotion.INI file.**

**LinkMotion.INI file is located on your hard drive C:\ Document and Settings> Folder with computer users name> Folder name Application Data> Folder name Solustan> Folder name LinkMotion> LinkMotion.INI.**

Click on the **Save** button and it will ask you to give a file name. Make sure to remember the file name, and where you are saving it. You can navigate on your hard drive where you want to save. You can also rename the file with what ever is easy for you to remember. Mostly our customers rename the file with their machine name.

#### **Load:**

**In case the LinkMotion needs to be loaded again from the CD supplied by Solustan, or you need to load upgraded version the user will be able to reload all the settings with your .INI file without wasting any time.** For loading the settings back select **Load** button and navigate to the saved .INI file and click on **Apply and OK**. Now click on the right mouse button when you are on the LinkMotion applet and exit the program. Go to the start button and launch back LinkMotion. You should see all your saved settings here now.

#### **Restore Defaults:**

Clicking on this button will load **default LinkMotion.INI** file that we supply with the LinkMotion driver.

**It is very important to exit Link applet and Re-launch the applet when you change and select another INI file for it to be effective.**

#### **Instructions for I.D. key Upgrade: (Necessary for upgrade for optional hardware key only)**

**This is only required when you need to upgrade for some new features or upgrade to use with the new version of LinkMotion or upgrade the number of executions for the I.D. Key.**

To upgrade your I.D. key you will receive a code as a text file from us.

Note pad or Word pad type of utility should open this code.

**Simply highlight the code with a cursor.**

**Make sure that you have copied complete code. This is very important.**

Right mouse click and select **Copy**.

Now launch **LinkMotion** Icon. Click on the **General Options** menu. Click on the button **Update I.D. Key**. A dialog box will open. Right mouse click inside the **Authorization Code** box. Select **Paste**. Click **OK**. Click on **OK** in General Options menu.

Now right mouse click on the **LinkMotion** icon and select **Exit**.

Go to the **Start** button. Select **All Programs**. Select **Solustan** folder and select **LinkMotion** application. Now you will see a **LinkMotion** Icon on the bottom right again. You are all set to work with your updated I.D. Key.

# Basic Fonts with LinkMotion - MaxFonts

**ACentury**

A B C D e f g 1 2 3

**AVictori**

*A B C e f g 1 2 3*

**AEras**

A B C D e f g 1 2 3

**A3Roman**

A B C D e f g 1 2 3

**A3RomanCap**

A B C D E F G 1 2 3

**A2Roman**

A B C e f g 1 2 3

**ASwiss**

A B C e f g 1 2 3

**ASkribe**

*A B c d 1 2 3*

**A2Skribe**

*A B c d 1 2 3*

**AScript**

A B C D e f g 1 2 3 4

**A2Script**

A B C D e f g h 1 2 3

**ABahaus**

A B C e f g 1 2 3

**AFuture**

A B C D 1 2 3

**ABlockEuro**

A B C D e f g 1 2 3

**ABlock**

A B C D e f g 1 2 3

**AContempo**

A B C D E F G 1 2 3

**AKaufman**

*A B C D e f g 1 2 3*

**AEnglish**

A B C D e f g 1 2 3

**ASymbol**



**AFifth Ave**

A B C D E F G 1 2 3

**AGothic**

A B C e f g 1 2 3

**AGothCon**

A B C D e f g 1 2 3

# Optional FontPak

**A4Swiss (4 Line Swiss)**

A B C d 1 2

**A6Optem (6 Line Optem)**

A B C d 1 2

**A4Roman (4 Line Roman)**

A B 1 2

**A6Gould (6 Line Gould)**

A B C d 1 2

**ATBlock**

A B C D 1 2

**ASlant**

A B C d 1 2

**ACircle**

A A A B B B C C C

**AOrnamet (20)**



**A6Swiss (6 Line Swiss)**

A B C d 1 2

**A10Optem (10 Line Optem)**

A B C d 1 2

**A10Roman (10 Line Roman)**

A B C d 1 2

**AMicro**

A B 1 2

**ATScript**

A B e f g 1

**AInterlock**

A A A B B B





































**A2Symbol (94)**




























































































**AOcasion (63)**



















































**Symbol Keyboard Layout**

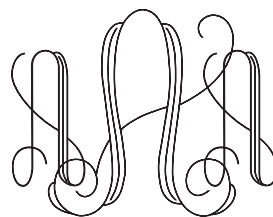
**A2Symbol Keyboard Layout**

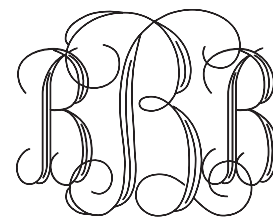
**ACircle Keyboard Layout**

# Alinterlock

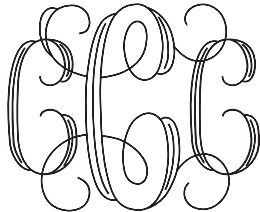
**aAa**



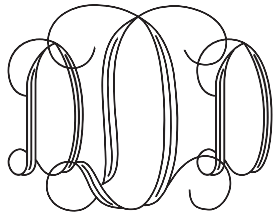
**bBb**



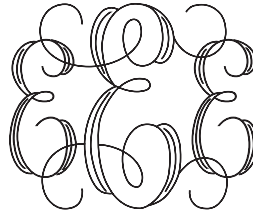
**cCc**



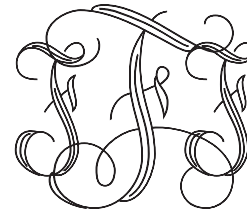
**dDd**



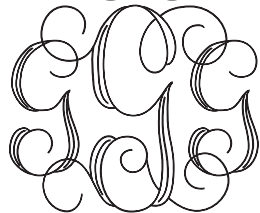
**eEe**



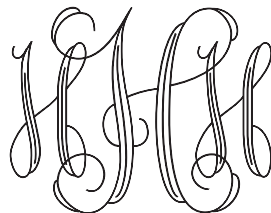
**fFf**



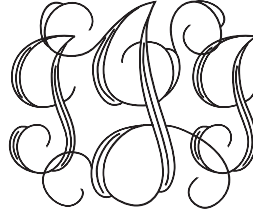
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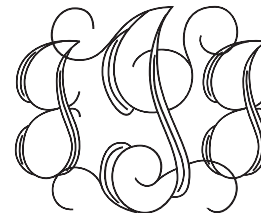
**hHh**



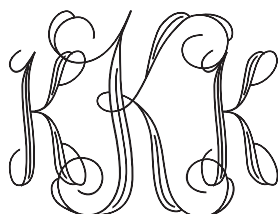
**iIi**



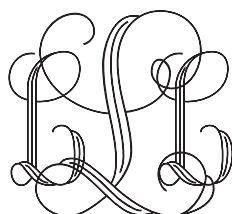
**jJj**



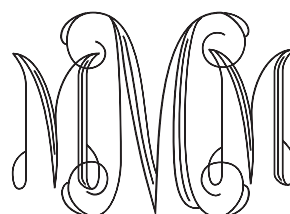
**kKk**



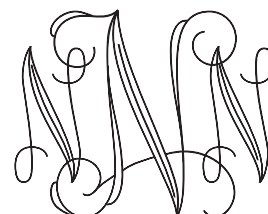
**lLl**



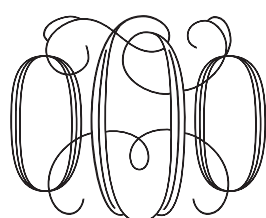
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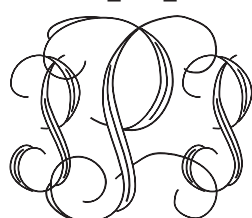
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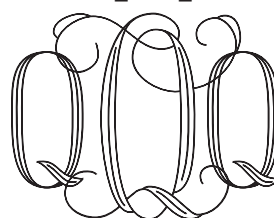
**oOo**



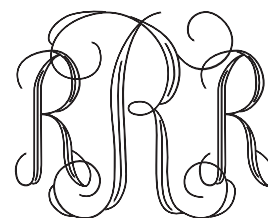
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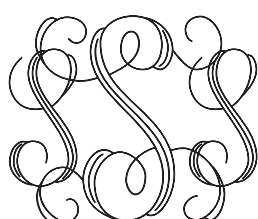
**qQq**



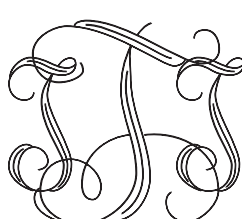
**rRr**



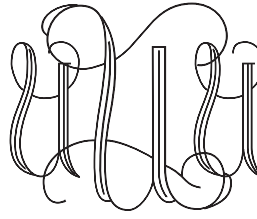
**sSs**



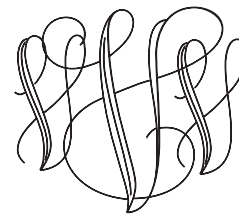
**tTt**



**uUu**



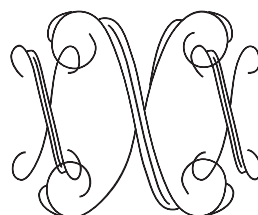
**vVv**



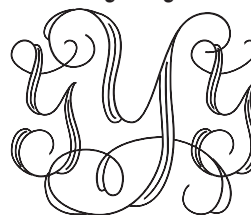
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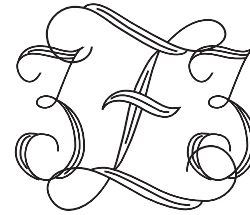
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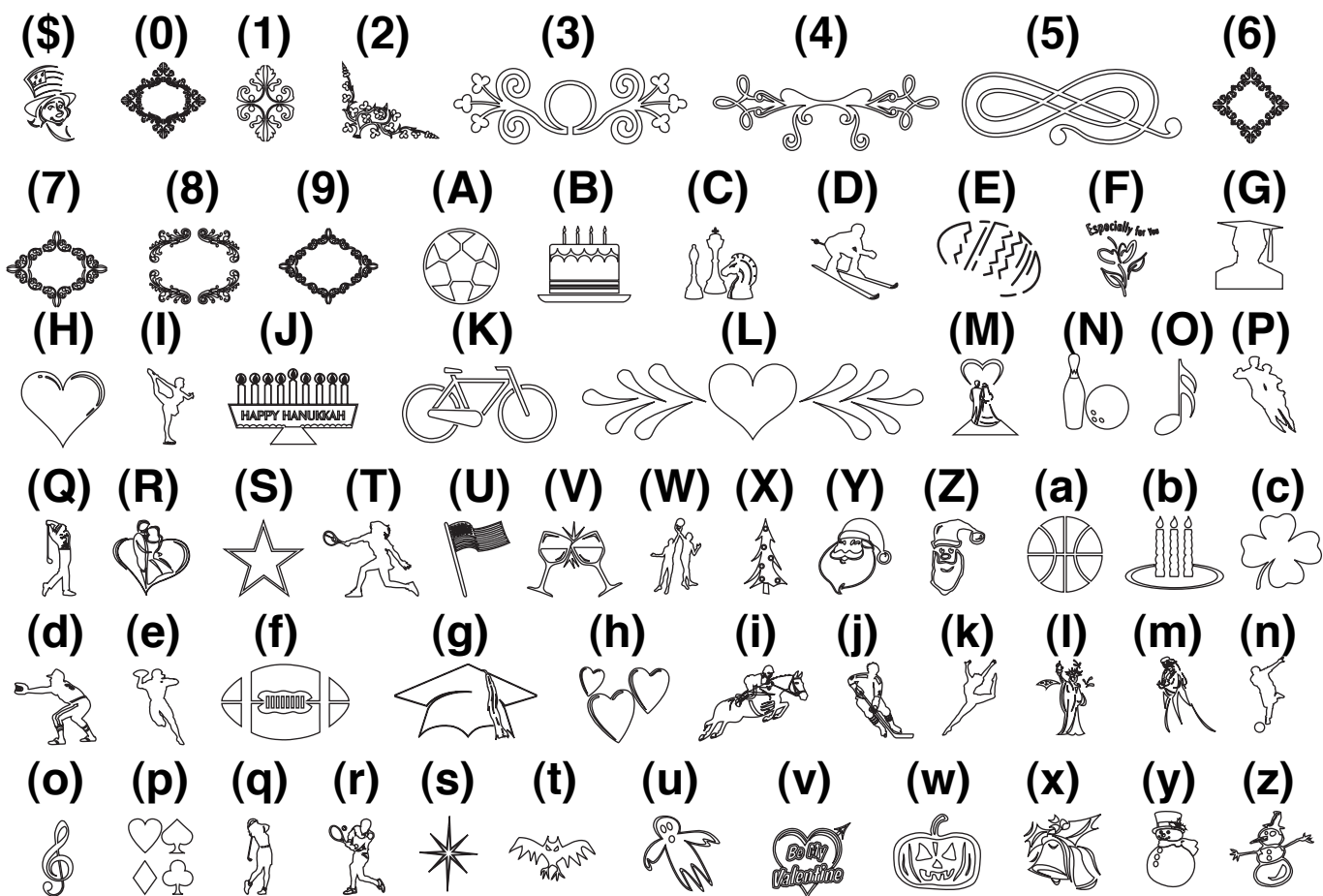
**yYy**



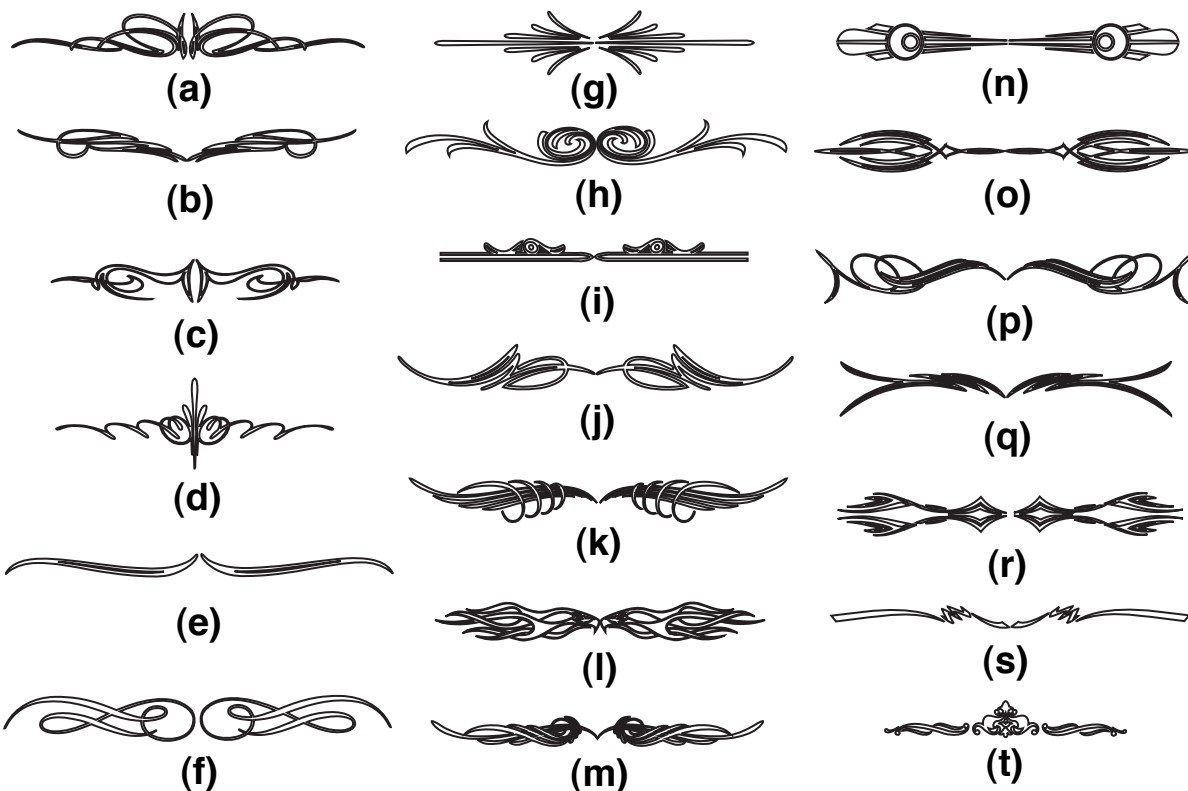
**zZz**



# AOcasion



## Ornamental Font (AOornamet) Keyboard Layout



# How to access International Characters

Please access numbers from the accounting key pad.

<u>Character</u>	<u>Key</u>	<u>Character</u>	<u>Key</u>	<u>Character</u>	<u>Key</u>
€	Alt 0128	ì	Alt 0204	ç	Alt 0231
‘	Alt 0145	í	Alt 0205	è	Alt 0232
,’	Alt 0146	î	Alt 0206	é	Alt 0233
“	Alt 0147	ï	Alt 0207	ê	Alt 0234
”	Alt 0148	Ñ	Alt 0209	ë	Alt 0235
™	Alt 0153	Ò	Alt 0210	ì	Alt 0236
ï	Alt 0161	Ó	Alt 0211	í	Alt 0237
£	Alt 0163	Ô	Alt 0212	î	Alt 0238
®	Alt 0174	Õ	Alt 0213	ï	Alt 0239
¿	Alt 0191	Ö	Alt 0214	ñ	Alt 0241
À	Alt 0192	Ø	Alt 0216	ò	Alt 0242
Á	Alt 0193	Ù	Alt 0217	ó	Alt 0243
Â	Alt 0194	Ú	Alt 0218	ô	Alt 0244
Ã	Alt 0195	Û	Alt 0219	õ	Alt 0245
Ä	Alt 0196	Ü	Alt 0220	ö	Alt 0246
Å	Alt 0197	à	Alt 0224	ø	Alt 0248
Æ	Alt 0198	á	Alt 0225	ù	Alt 0249
Ç	Alt 0199	â	Alt 0226	ú	Alt 0250
È	Alt 0200	ã	Alt 0227	û	Alt 0251
É	Alt 0201	ä	Alt 0228	ü	Alt 0252
Ê	Alt 0202	å	Alt 0229		
Ë	Alt 0203	æ	Alt 0230		

## **Application Compatibility with LinkMotion:**

Go to [www.solustan.com/support](http://www.solustan.com/support) and download instructions for the appropriate design application you might be using. Some applications have their own limitations and mostly it is listed in the document. We are adding information as we test with respective applications.

Solustan tests the primary function of accepting hair lines (vector lines) from the third party application software to make the vector moves on the machine using LinkMotion driver. Solustan may test additional functions. However, it is not a detailed testing. The developer and marketer of the third party software make changes to their applications quite often. It is the responsibility of the user to make sure that the necessary functions are available while making the choice of off-the-shelf application software.

Solustan's liability is limited to the purchase price of the LinkMotion driver software.

1. Corel Draw version 9, 10, 11, 12, X3, X4 and X5
2. Corel Paint Shop Pro (Raster Only)
3. Adobe Illustrator
4. EngraveLab / SignLab version 6.0 and higher
5. FlexiExpert
6. FreeHand MX
7. Gerber ArtPath and Composer
8. Vinyl Express
9. Xenetech
10. AutoCAD version 2000 and higher
11. DesignCad
12. DolphinCAD specially designed version for LinkMotion
13. Instant Engineer 14
14. Rhino 4.0 Beta
15. IntelliCAD (AcceliCAD)
16. BarTender (Raster only)
17. Microsoft Word (Raster only)
18. PhotoShop (Raster only)
19. MaxMotion – Windows XP and 2000 (Not supported in Vista, Win 7 32 or Win 7 64)

## **Frequently Asked Questions:**

### **Section I - Microsoft Windows configuration and computer related questions:**

#### **1. What is the minimum configuration required for the PC?**

Windows XP operating system with Service Pak 2 or higher and Microsoft .NET 2.0 or higher Framework installed and USB 2.0 port,  
Processor speed of at least 800 Mhz, minimum RAM memory 512 MB, 1 GB preferred.  
40 MB of Hard drive free space, Screen resolution of at least 800 x 600.  
Service Pak and .NET 2.0 Framework are (free) downloadable from Microsoft's website.  
CD-ROM drive is not required, if the driver software was down loaded from the web site.  
CD-ROM drive is necessary, if the software was received on a CD.  
Printer Port or Com port for connection to your machine.

#### **2. How to check if I have installed Service Pak2 or higher on my computer?**

Go to the **Start** button. Select **Control Panel**. Select **System**. Now in **General** menu it should show if **Service Pak 2** is installed. Also you can install and uninstall by windows standard Add/Remove program procedure. Make sure you install LinkMotion after you install windows operating system related update first.

#### **3. How to check if I have installed .NET Framework 2.0 or higher on my computer?**

**Go to the Start button. Select Control Panel. Select Add/Remove programs. Here you should see if you have installed the .NET Framework 2.0 of Microsoft.** This is required to work with our new version of LinkMotion.

#### **4. How can I check the processor speed and RAM memory on my PC?**

Go to the **Start button** on the System Tray on the bottom left and **select Control Panel**. Select **System** from the Control panel. Here you should see information for the version of your operating system and **under Computer** you should see the **processor speed and the RAM memory** installed on your computer.

#### **5. How to see hidden folders in windows?**

Go to the **Start button**. Select **Control Panel**. Select **Tools Menu** and select **Folder option**. Click on the **View menu**. You should see a folder called **Hidden files and folders**. Here select the button for

**Show hidden files and folders.** Click on the **Apply button**. Now you will see all the folders. This is useful to see the configuration file name **LinkMotion.INI** for **LinkMotion driver** application.

## **Section II - LinkMotion Driver:**

### **1. Do I need to access LinkMotion driver software once loaded?**

Generally, you simply deal with your job design software and your machine. We do provide an accompanied settings application. This application can be invoked from its icon in the System Tray area. This application will allow you to choose a few settings by going to different tabs (menu) like Material Properties, Machine parameters, Origin setup and Motion Control Boards. Make proper selection, click on the apply button and then start the design application.

### **2. How do I know if my LinkMotion is installed properly?**

When you launch LinkMotion applet does it show the title “**LinkMotion for My Machine-USB – Ver. X.XX**” (version that you have). If this is not proper you may have installed for the wrong machine. You need to **uninstall and re-install LinkMotion again** by windows standard uninstall procedure.

If you had a trial version you need to purchase the full working version.

### **3. How to see the file for my LinkMotion related configuration settings?**

This file is named **LinkMotion.INI**.

**Go to your C:\ > Documents and Settings > Folder with computer User’s name (how ever you have set up your computer) > Application Data > Total Graphics Network > LinkMotion > LinkMotion.INI.**

**This file has all your machine related settings. You can save this file under different name as well as reload this file from where you might have saved this file.**

### **4. I want to design in millimeters and not inches. How do I change?**

Simply go to the **General Options tab** and change from **inches to mm** by clicking on the scroll down arrow and then **click on the Apply button**. Similarly you can change to cm also. It is that easy.

### **5. I am sending file for printing and nothing is happening. What am I doing wrong?**

This situation may occur due to any of the following:

(A) Check if you have given the Print command from your design application.

(B) Check the print queue for any extraneous documents and remove them.

(C) Check the job feed rates and other settings to make sure that they are all correct.

(D) Printer driver installed for your machine may not have been selected as **DEFAULT DRIVER**. Please check in **Control Panel>Printers and Faxes>Your Machine Driver** (this should be selected as default driver).

(E) You might have selected **thick outline or filled object** in your design. **White fill is also not proper to send the job to a machine. Use only Hairline for any job you design with graphics or text. If you sent the file for print by mistake with thick line or the filled object go to the print spooler and make sure you delete the file properly before sending the new corrected file.**

(F) If **Service Pak 2** was not installed on your **Windows XP operating system** you may see the problem of LinkMotion not sending anything to the machine. You need to **uninstall the LinkMotion** and then **install the Service Pak 2** and **re-install the LinkMotion driver**.

(G) Make sure to design the job within the size of plotting area available with your machine table size.

(H) Make sure to check the setting for the port where you have connected the cable that goes from your computer to the engraving machine. If you are using Com port you need to setup Baud rate, Hardware handshake, Stop bit type of information.

## **6. Can I preset or change the values for the speeds of operation for different materials? Where and How?**

Launch LinkMotion from Systems Tray. Go to Material Properties. Set values for **Job Feed Rate** of operation for different materials. Click Apply and then send the file again to the machine. Read more details in the HELP tab under the chapter **Using LinkMotion or PDF Manual**.

## **7. I have setup and customized LinkMotion for my needs. Now, you sent me information for new version of LinkMotion. How can I preserve my settings while upgrading to a new version?**

It is very easy. Remember to first save your older configuration file and then uninstall. Follow the uninstall instruction (from the end of the document) from installation instructions. Now install the new version and bring back your older configuration file from General Options tab by Load button. Re-Launch LinkMotion driver one time and then work with your new version.



## **Section III - LinkMotion and Design Applications:**

### **1. My machine moves properly with Control Pad of LinkMotion but when I send the job I have a problem. Why?**

You need to make sure that your page size in the design application is same as the machine (table) size declared in the machine properties of LinkMotion. Printer driver selection from your application should be for Linkmotion driver installed for your machine. Shapes you design should have either **hair line, thinnest line or zero width line** selected for vector output. **Shapes cannot be filled for vector output.**

Please refer to the most recent document on **help section** or LM&USB and LM & Popular applications.

### **2. Can you tell me briefly the settings I should make sure of in Corel Draw! version 11 or 12 to make Corel and LinkMotion compatible with each other?**

Yes, we suggest that you take a look at the HELP section and read the chapter on LinkMotion and popular applications. We have listed a number of settings and suggestions.

**Also check help menu or LM&USB and LM&Popular applications.**

### **3. How can I change starting positions of a job?**

Starting position is controlled by your design application as well as what you have **selected in Start Position under Origin Setup of LinkMotion. Please read and understand functions of both applications from their help section before using it.**

### **4. Why is my job being cut goes back and forth all over the machine?**

Most design applications generally will output jobs in the order that it was designed. If you wish to see a different order then you need to use sorting available from the Design Application. Please check your design application functions. **LinkMotion and specific Design Application** document has more detail explanation.

### **5. How can I design a job in different colors or layers?**

These functions are available from the design Applications. Please check the document of your design application or the document name **LinkMotion with popular applications.**

### **6. How can I duplicate my design to cut several times?**

These functions are available from the design Applications. Please check the document of your design application or the document name **LinkMotion with popular applications.**

## **7. Can I cut the same job again since it was not cut all the way (depth) properly?**

User should always do preliminary testing for proper depth and then send the job for production. Following conditions will allow you to cut the job again.

Check the box under **Origin setup** for **Return to 0,0 after job**. This allows your tool to be parked back in the same position as before.

Make sure to make changes in the **depth** selection of **Material Properties**, Click on the **Apply button** for it to be effective.

Now you can select the object or the shapes that did not cut properly and send it again to the machine. Make sure to look at the preview before you create the file for proper location of the output.

Make sure that proper M & G-Code is generated.

## **8. Can I cut any part of the job again without sending a complete job again?**

Yes, Follow the same procedure as in answer no. 5 from above.

## **9. Can I use any design applications to save my job?**

Yes, you can use other applications as long as the design application is capable of sending a vector output file. Design application should allow you to design shapes with thinnest line or hairline or zero line width and no fill. Word processing type applications are not capable of sending the vector output. Please check with your supplier for more information. We document the one we do testing with.

## **10. What can I do to get more help?**

Support is freely available by email – [support@solustan.com](mailto:support@solustan.com)