

Laser Engraving & Cutting Control System

DSP5.3

Manual

V1.6

May, 2010

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1 System Installation

1.1 Contents of the Control System

Control System includes hardware (controller 1 piece MPC6515/35) & control software & Dongle .All in the package include software CD.

CD Content list: (take MPC6535V4.2.2.0 for example)

No.	File & list	Function	Dir	Remark
1	Setup	Laser Engraving & Cutting software (including the Manual& installation file)	..\	Including the wizard“setup.exe”and other file necessary,if installation failed,file may missed or broken, please contact us for replace.
2	LTSetupUSB V2.0	Install the driver from USB	..\	Include “ezusb.sys” 、 “LTUSB.inf” 、 “ RWIniFile.dll” 、 “ LTSetupCfg.ini” 、 “ MPC6535USB2.0 driver.exe”、 “manual.txt”
3	Doc	Controller manual	..\	Include MPC6535 manual.doc 、 PAD03 manual.doc 、 manual (DSP5.3) 6535.doc
4	Dll	Dynamic Link Library	..\	Include CommM05.dll 、 mpc05ls.dll
5	Fmw	Firmware	..\	Include 65354220.HDW 、 65354220.FMW
6	Tools	Auxiliary tool	..\	Include“Config.exe” 、 “MPC6535 test.exe”
7	PadFmw	PAD Firmware	..\	Include eeprom.hex 、 PAD03.hex

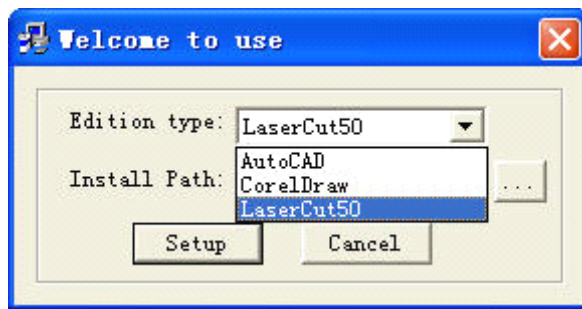
1.2 Installation of the System


Please pre install CorelDraw or AutoCAD in the PC, the system now can support CorelDraw11, CorelDraw12, CorelDraw13, CorelDrawX4, AutoCAD2000 or above version.

Any question regarding the AutoCAD Version which not list here, please contact provider.

We strongly recommend user install authorized software version CorelDraw Or AutoCAD , otherwise , it may cause the software working innormal. Leetro will not be responsible for such kind of machine damage.

Run Setup.exe, dialog box appears as below:



Choose software version to install, click **Install**, default install path "C:\LaserCut53", click  to change the path.

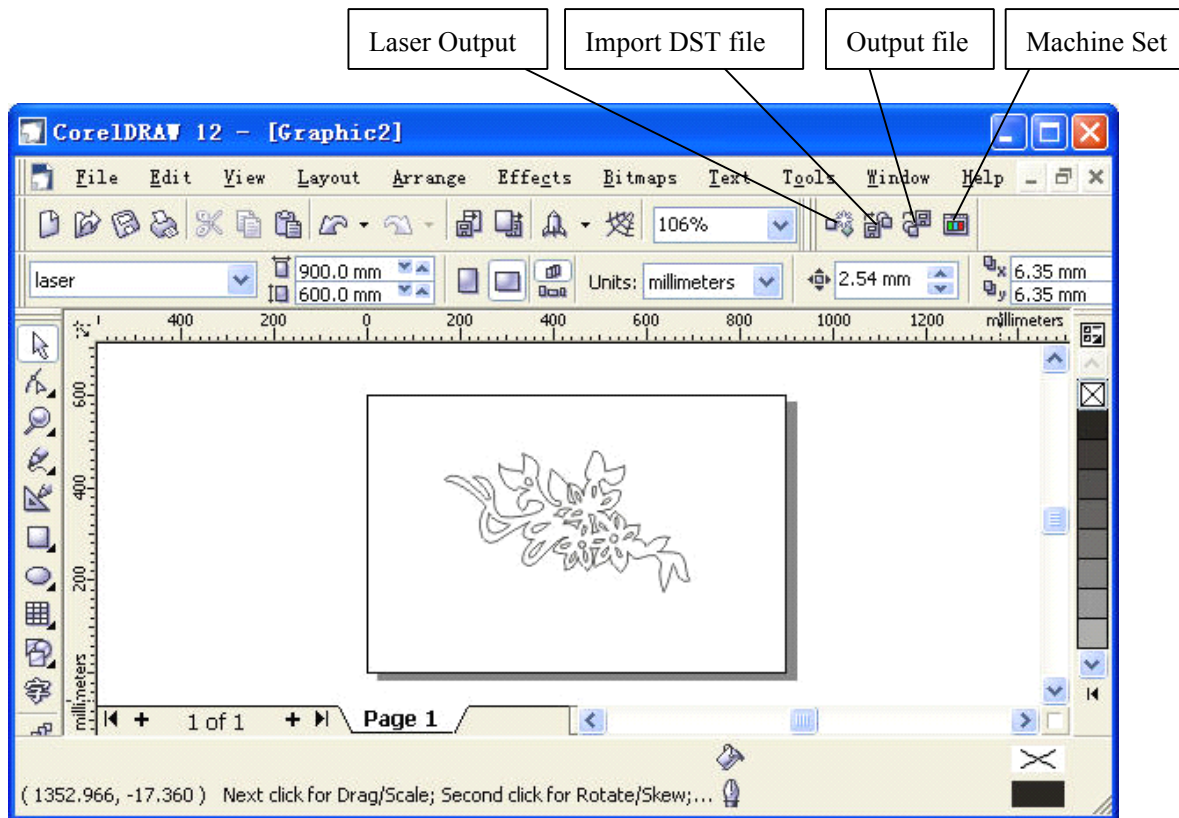
Run CorelDraw or AutoCAD.

Please install LaserCut51、LaserCut52、LaserCut53 in different hard disk volume, i.e D or E in case you want to install them in the same PC.

Note: The system can not run without the Dongle. Please take care of the Dongle, you need buy a new one if you lost the dongle.

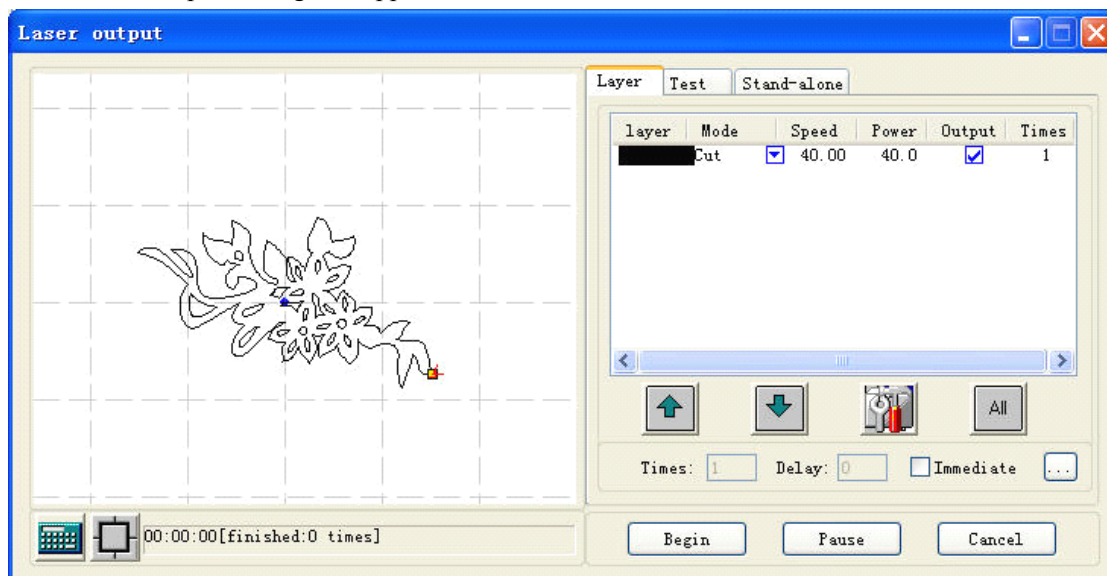
2 CorelDraw Output Edition

Add Laser Process Menu in CorelDraw include: Laser output, Import DST file, Output file and Machine Set, shown as below:



2.1 Laser Output

Click Laser Output, dialog box appears as below:



2.1.1 Layer


See also in Chapter 5.


2.1.2 Manual

See also in Chapter 5

2.1.3 Procession File (Download Data)

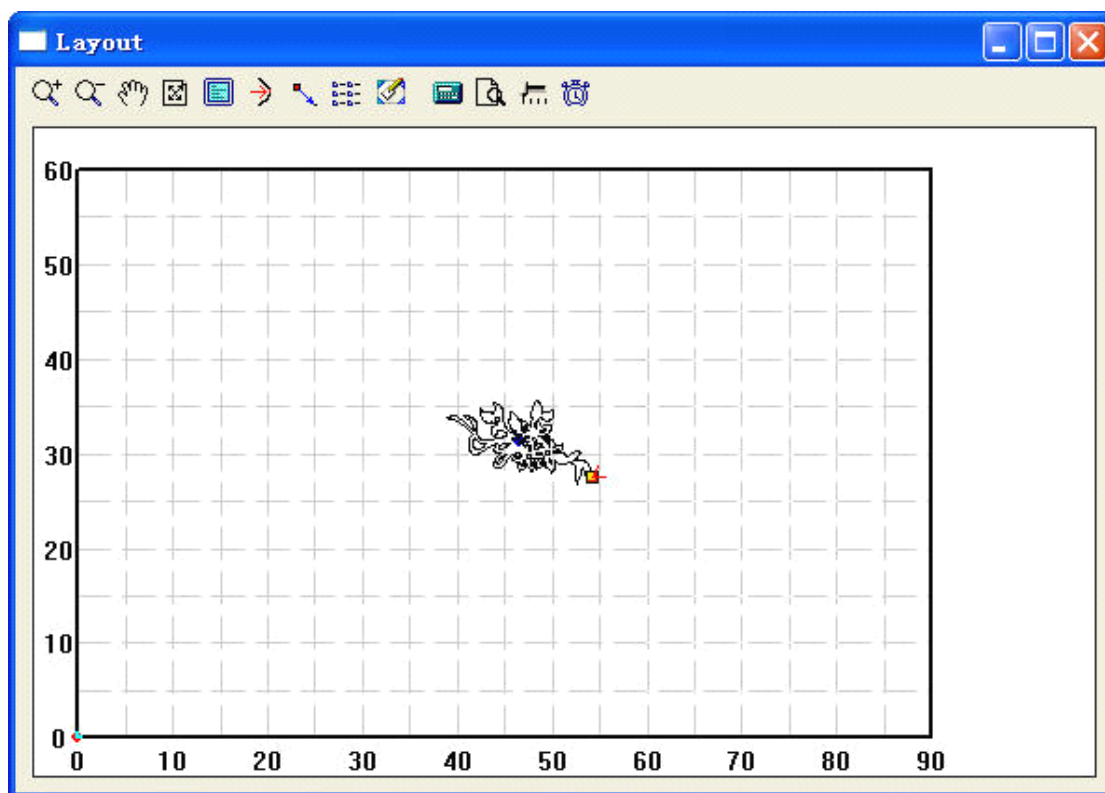
See also in Chapter 5.


2.1.4 

Calculation: when Drawing or process parameter change, recommend to click  to save the parameter into procession file.

2.1.5 

Layout. Click  then,




2.1.5.1 : Zoom In

Click to enlarge the drawing with mouse, (data will not change).

2.1.5.2 : Zoom Out

Click to Zoom Out the drawing with mouse, (data will not change)


2.1.5.3 : Move Screen

Click to Move Screen


2.1.5.4 : Full Screen

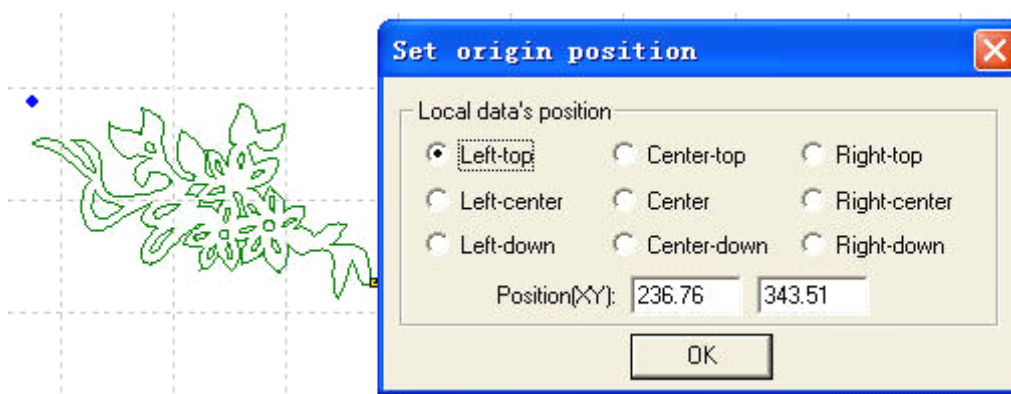
Click it to show full processing data range.

2.1.5.5 : Worktable Size

Click  to show the whole worktable size/coordinate system and the full range of the processing data.


2.1.5.6 : Set Origin Position

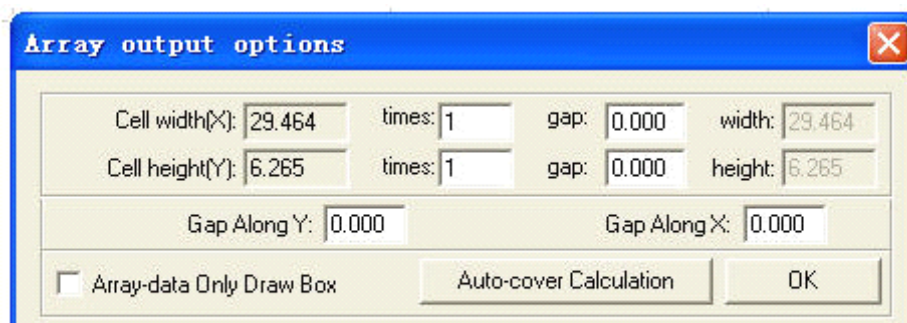
Set Origin Point, after work done, the laser head will back to this point. Click , mouse arrow changes to a small point, dialog box appears as below.



You may set left bottom, right bottom point of the processing data or move the mouse to any position; you may also input the origin (x, y) to set it precisely.

2.1.5.7 : Array Output Options

Click , dialog box appears as below:



LASER

Cell Width (Height) X/Y: origin size of the processing data.

Number: lines or columns needed of the Output data.

Gap: gap between lines or columns.

Total Width: width of the whole data.

Total Height: height of the whole data.

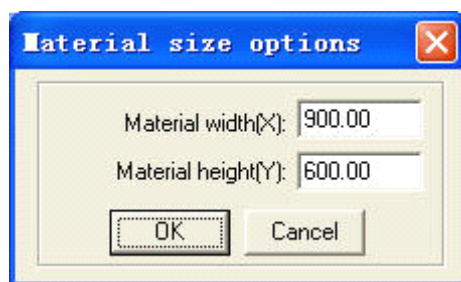
Gap Along Y: length of the dislocation between adjacent columns.

Gap Along X: length of the dislocation between adjacent lines.

Frame Only to Hint Array Data: after you select this option, only diagram is shown on the screen, the rest of the diagram will be shown as frame.

Auto-Cover Calculation: auto calculation of the total lines and columns needed to cover the whole worktable size will be made according to the backlash and length of dislocation you have


input. Click it, dialog box appears as below:



Material Width: length of the materials to process (default as the length of the worktable).

Material Height: Width of the materials to process (default as the width of the worktable).

Click "OK", the system will automatically calculate the numbers to cover the entire materials to process according to the size of the raw material in the setting.

2.1.5.8 : Move worktable

Click this button, move the worktable by dragging the mouse, and change the coordinate relation between the worktable and work piece.

2.1.5.9 : Calculation


Same function as [Calculation] in the 2.1.4

2.1.5.10 : Simulate

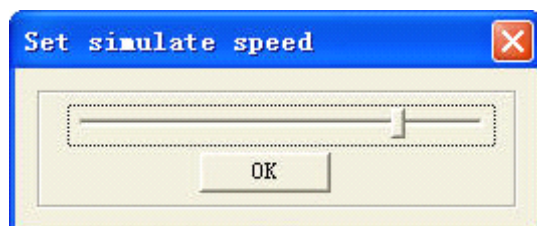
Click this button to simulate the procedure of output for checking the output result. Once the simulate result meet the requirement, begin the actual processing.

Strongly recommend simulate before procession to avoid fault.

Click "Esc" to stop simulating.

2.1.5.11 : Click this button to set simulate speed

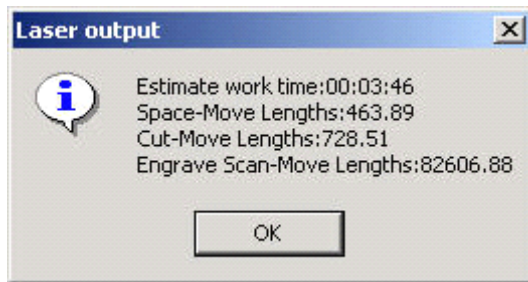
Click this button, dialog box appears here.



Drag the progress bar to adjust the simulated speed.

2.1.5.12 : Time

Click this button to show the estimate working time. Dialog box appears as below:



2.2 Import DST file

Click to import DST files (.DST) which CorelDraw can not support data.

2.3 Output file

Click to save and output the processing files

2.4 Laser Machine Setting

Click to enter the machine setting window set the machine, See Chapter 6.