 Software Installation		
 Finished Installation Interface		
 USB Driver Installation Interface		OOM/ A smaller Oratting a Demonstration
 Software Interface		80W Acrylic Cutting Parameter
 Import Import Applicable Format		
 Data Check		100W Acrylic Cutting Parameter
 Curve auto close		
 Combine curve		135W Acrylic Cutting Parameter
 Delete Overlap		Toot Acrylic Outling Fuldheter
 Curve Smooth		300W Acrylic Cutting Parameter
 Show Path		Soow Acrylic Culling Parameter
 Cut Optimize Inside to outside		COM/ Engraving Developmentar
Order of layer Block handle		60W Engraving Parameter
 Layer Parameter Layer Parameter-Cut Layer Parameter-Scan	Layer Paramet	ter-
Dot		60W Half-cutting Parameter and
 Line/column Setup		
 Position		remarks
 Go scale		
 Start Pause/Continue Stop		135 W Glass Tube Plywood Cutting
Summary		, , , , , , , , , , , , , , , , , , , ,
How to choose different size focus lens		Parameter
About Air Pressure		

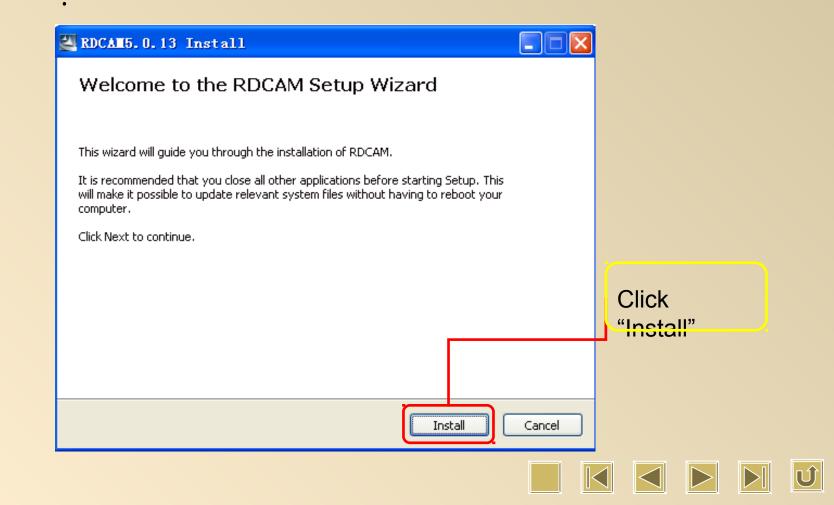


Software Installation

Double click



, here comes out software installation window



Choose Software Version, Language and Mother Board :

Welcome to use			Install USB driver
Inst	tall USB driver		Choose Type
Type:	LaserWork	~	
Language:	Simplify Chinese	~	Choose
Mainboard:	RDLC320	*	Language
Locate insta Demo version Pen drawing Plug LaserWo	lines		Choose Mainboard
Install	Exit		Install the software
		_	



Finished Installation Interface

RDCAM5.0.21	Install	
R	Welcome to use	
	Install USB driver	
Please wait while	Type: RLaserSetUpV5	iinutes.
	Language:	
	Mainboard V Install Finish!	
	Locate OK Demo ve	
	Pen drawing lines	
Execute the comn		
	Install Exit	
Convright 22011R		
	< Back Next >	Cancel

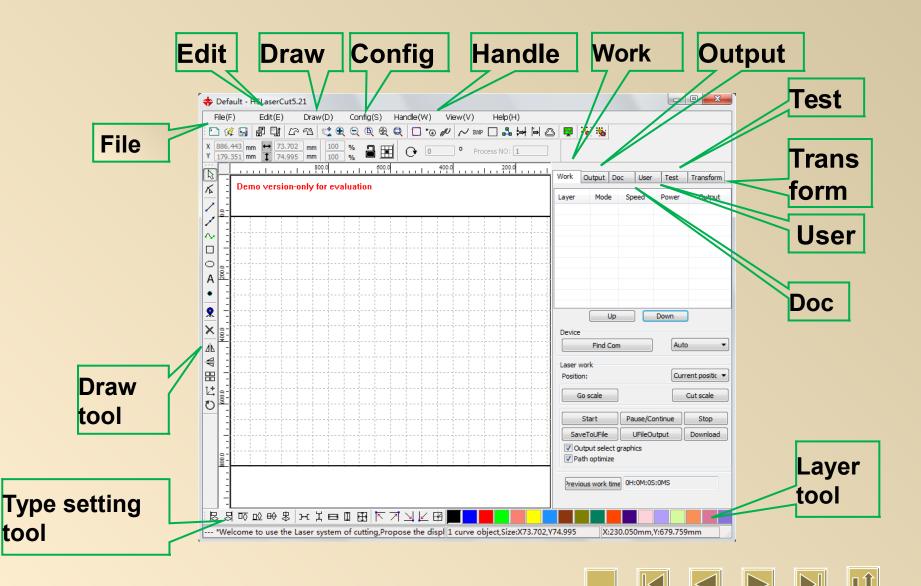


Finished Driver Installation Interface

🛃 RDCAM5.0.21	Install				
k}	Welcome to use				
	Install USB driver				
Please wait while	Type: Di scorSoti loV5				
	Type: RLaserSetUpV5 X				
	Mainboard (1) Install Finish!	tall the driver			
	Locate OK				
	Demo ve Pen drawing lines				
Execute the comn	Plug LaserWork				
	Install Exit				
Copyright ?2011Rec	la(SZ)Ltd,				
	< Back Next >	Cancel			

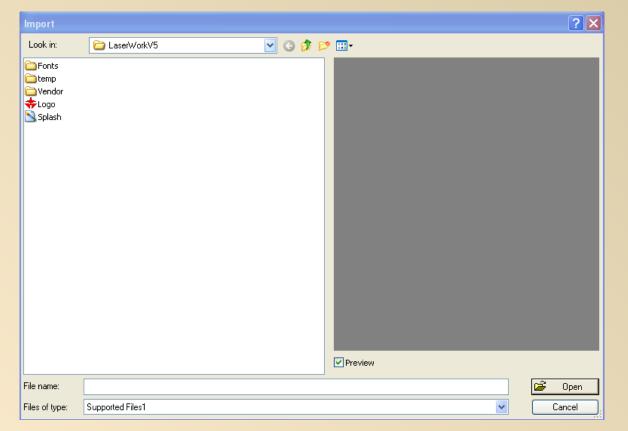


Software Interface





Click one time diamond to import our design shown in the following. Choose proper file and click [Open].





Import Applicable Format

勖

.ai / .dxf / .plt etc are applicable

Import		? 🛛
Look in:	🔁 LaserWorkV5 🛛 🕑 🕜 🌮 🖽 -	
Conts Contemp Contemp Vendor ◆ Logo.ico Splash.bmp	DXF Files (".dxf) DXF Files (".dxf) DST Files (".dxf) DSB Files (".dxb) BMP Files (".dxb) BMP Files (".bmp) GIF Files (".ipg,".jpeg,".jpe;".jpf) PNG Files (".jpg,".jpeg,".jpe;".jpf) PNG Files (".ipg) MNG Files (".ing) ICON Files (".ing) ICON Files (".ing) ICON Files (".cur) TIFF Files (".tif,".tiff) TGA Files (".tiga) PCX Files (".tga) PCX Files (".tga) PCX Files (".tomp) WMF Files (".wmf) EMF Files (".ipg) JP2 Files (".jpg,) RAS Files (".ras)	
File name:	PNM Files (".pnm;".pgm;".ppm) SKA Files (".ska) RAW Files (".raw)	🗃 राम
Files of type:	Supported Files1	Cancel







Click , then we will see the following:

Data check		
Check close	Error(mm): 0.01	Close check end Find unclose curves:9 Self-cross check end Not find self-cross curves
Check self-cross		Cross check end Find cross curves:1 Overlap check end
Check cross		Find overlap lines:279
Check overlap		
Enable error	Error(mm): 0.01	Check



Curve auto close



Click so we will see the following:

Setting close error	
Close error(mm): 0.1 Force to close Ok Cancel	

Closing Allowance: Curve will close automatically when the allowance is smaller than the number we type into.

Compulsory Closing: Tick this function for compulsory closing.





Click there is a new interface coming out as follow.

Setting combine error 🛛 🛛 🔀	
Combine error(mm): 0.1	
Ok Cancel	

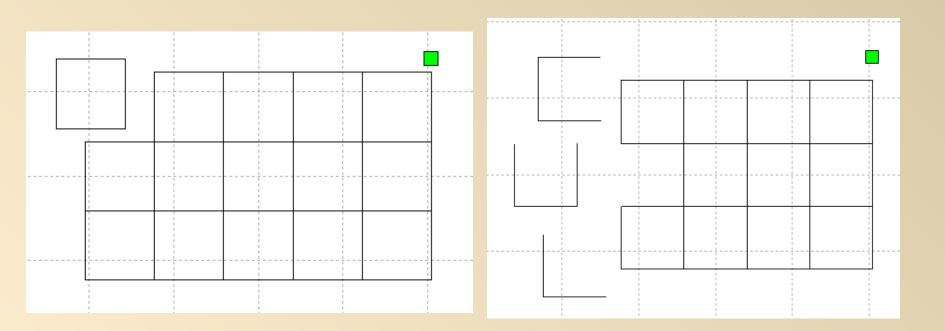
New curve will be seen according to the above setting for combination allowance. Max. is 5mm.



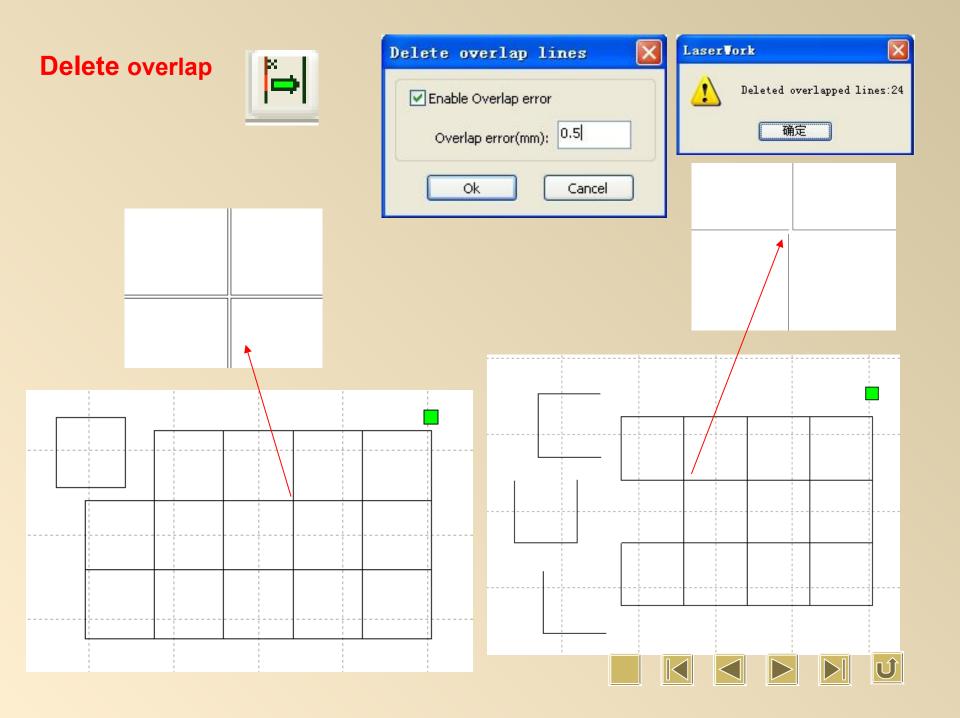
Delete overlap



Delete overlap lines 🛛 🔀	LaserVork 🛛 🔀
Enable Overlap error	Deleted overlapped lines:24
Overlap error(mm): 1 Ok Cancel	







Curve Smooth

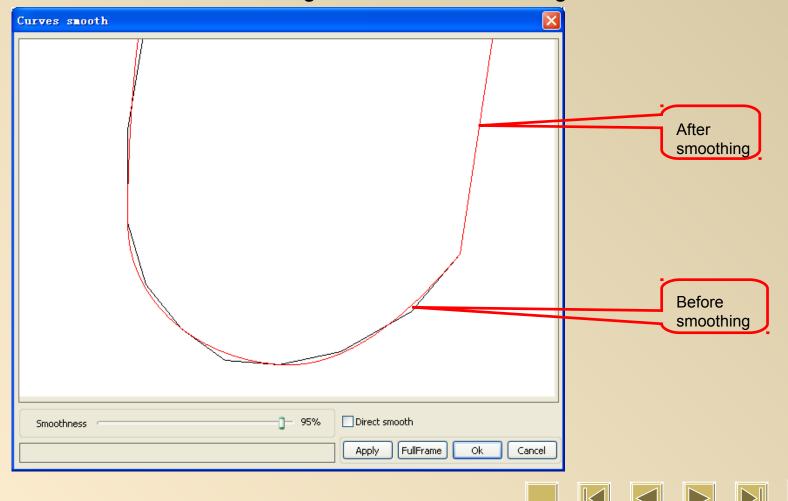
Click 🔁 so as to smoothen curve with the following way:

Curves smooth
CHOLMOUTON SA
Smoothness 95% Direct smooth Direct smooth Ok Cancel





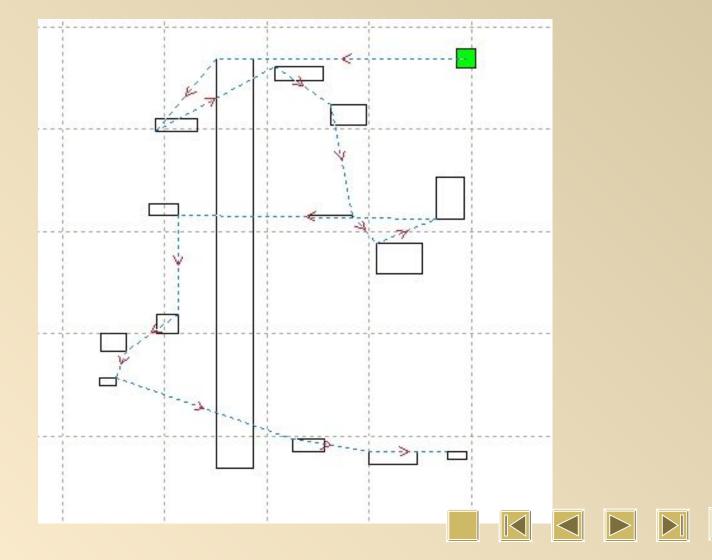
Adjusting smooth rate then we will see the previous and after changing result. Black line is before smoothening, and after smoothening is red line.



Show path



Tick "path displaying" so we will see the order and direction.







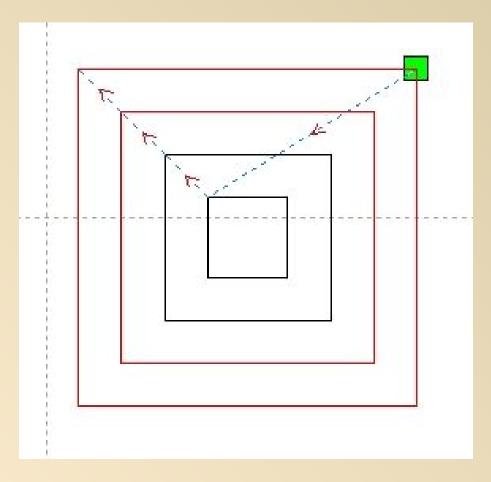
To optimize order for outputting, we have to use this function.

Cutting optimize handle
Order of layer
Inside to outside
Single inner to outer
Block handle Height: 50 Dir: Up to bott
Start point optimize Auto determine start point and direction
Ok Cancel



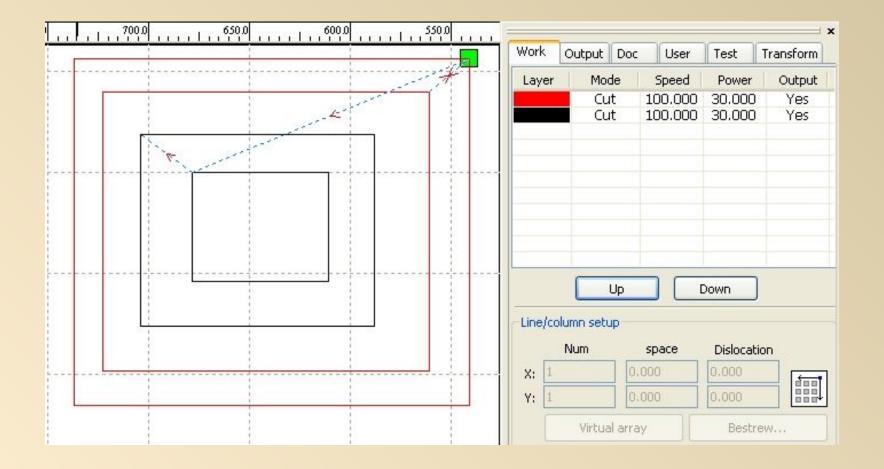
Inside to outside

Inside to outside Single inner to outer

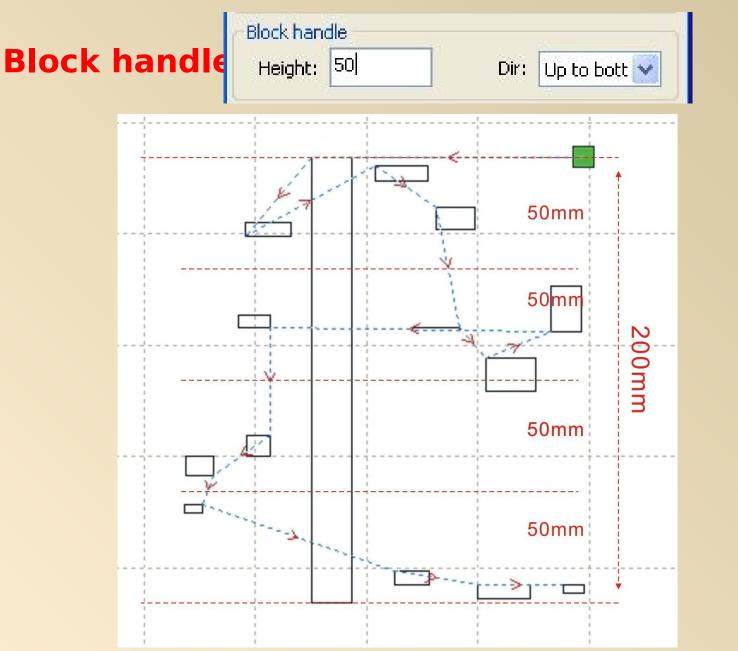














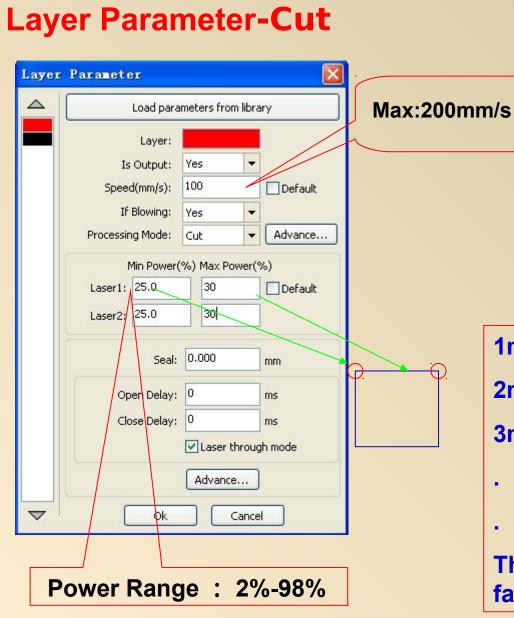
Layer Parameter

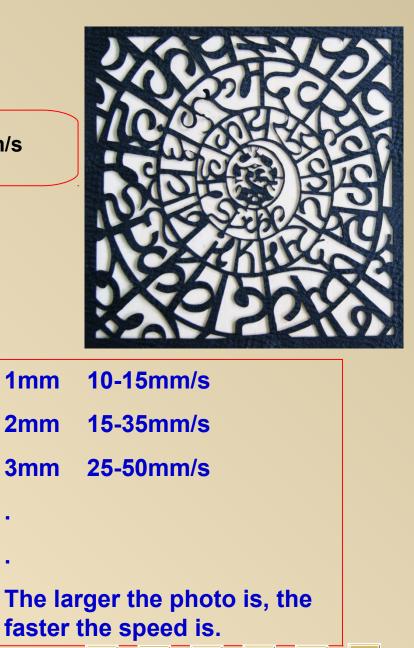
Work	Output	Doc	User	Test	Transform
Layer	Mod	de	Speed	Power	Output
	Cu	ıt	100.000	30.000	Yes
	Cu	it	100.000	30.000	Yes

Click 2 times on different color to get layer setting interface

Layer	Parameter		X	Layer	Parameter		
	Load para	meters from libr	ary		Load para	ameters from libra	ary
	Laser1: 30	Yes ▼ No Yes ▼ Cut ▼ %) Max Power(30			Layer: Is Output: Speed(mm/s): If Blowing: Processing Mode: Min Power Laser1: 30	Yes 100 Yes Cut Scan Cut Dot 30	Default Advance %) Default
	Laser2: 30 Seal: Open Delay: Close Delay:	0.000	mm ms ms gh mode		Laser2: 30 Seal: Open Delay: Close Delay:	0.000] mm] ms] ms gh mode
~	Ok	Cance	el		Ok	Cance	9



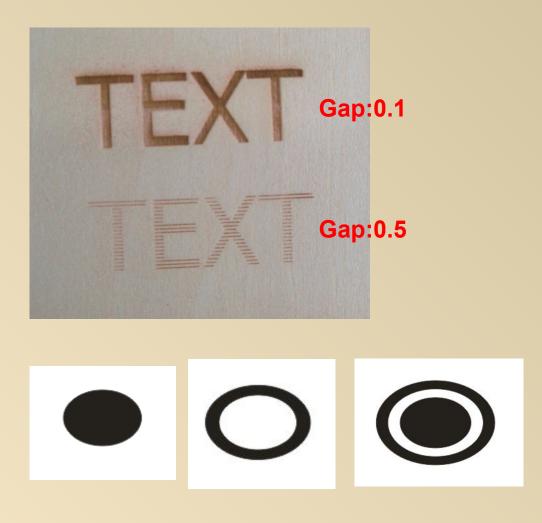




Ú

Layer Parameter-Scan

Layer	Parameter								
	Load para	Load parameters from library							
	Layer: Is Output:	Yes 🔻							
	Speed(mm/s): If Blowing:	200.00 Yes	•	Default					
	Processing Mode:	Scan	-	Advance					
	Min Power	(%) Max Pow	er(%	6)					
	Laser1: 20.0	20.0		Default					
	Laser2: 20.0	20							
	Negative Engr Output direct Ramp Effect Ramp Length:	Inde		ed Scan Ident output					
	Overstriking: L	In-process	•						
	Scan Mode: 🛛	_swing	•						
	Interval(mm): 0	.1		Advance					
	Ok	Ca	ncel						

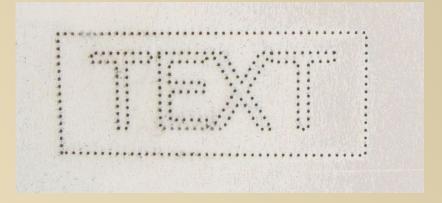


Attention: It must be closed design.



Layer Parameter-Dot

Layer	Paramete	er				
		n libra	ry			
	Layer: Is Output: Speed(mm/s): If Blowing:		10	Yes 100.00 Yes		Default
	Processir	ng Mode:	Do	it	-	Advance
	r	Min Power	(%)	Max Po	wer(%	%)
	Laser1:	30.0		30.0		Default
	Laser2:	30.0		30.0		
		Dot time: ot interval: Dot length:	1.	100 000 Center	dot	s mn mn
	(Ok			ance	



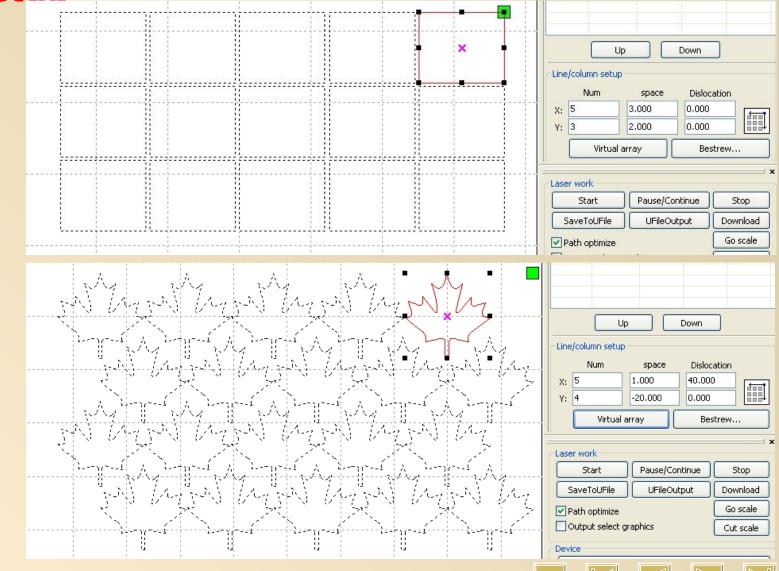
Gap: 1mm Length: 0mm



Gap: 1mm Length: 2mm



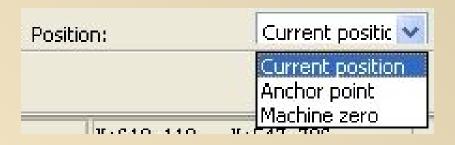
Line/column Setup







Position



Obviously, this function is used to set up starting point for laser head. It has 3 choices: present, previous, machinery

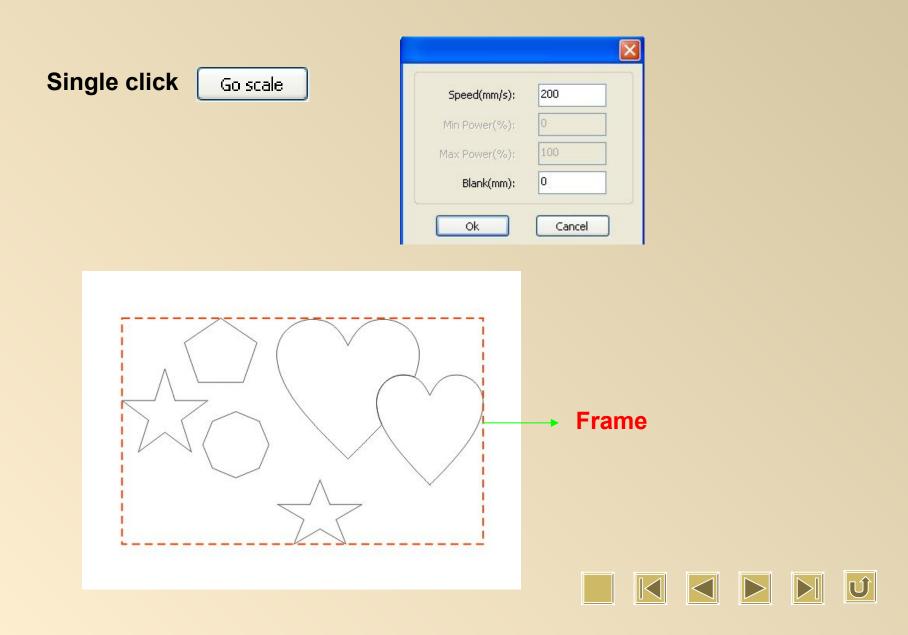
1.Present: Laser Head stats to move from the present location.

2.Previous: Choose this one, laser head moves from the previous setting point. And it can be changed by "Origin" on panel. Origin

3. Machinery: Laser Heads moves back to Zero Point, that is the right side at the top of platform.



Go scale



Start Pause/Continue **Stop**



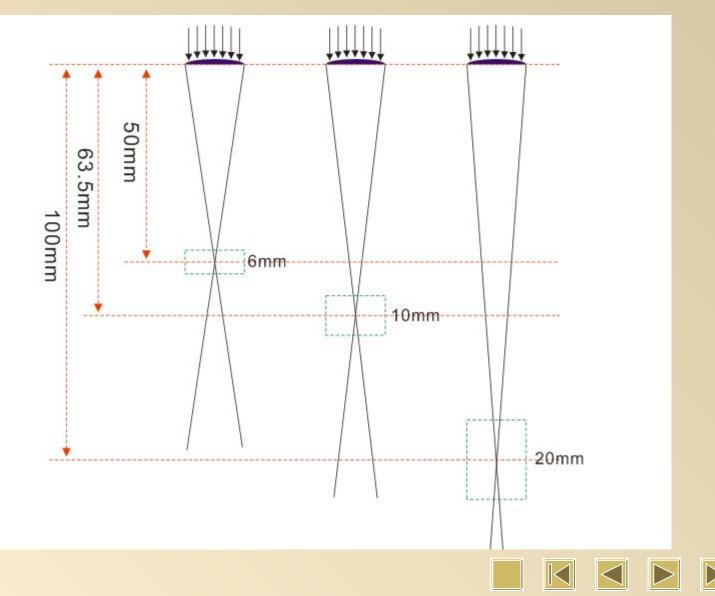
1. Start: Press this button so as to give order to machine to start to work.

2.Pause/Continue: Single click for pause, and double click to continue.

3. Stop: Machine stops working if we press this button.



How to choose different size focus lens



Air Pressure

Fabric Cutting: Adjust accordingly if there is no deformation for fabric sheet. The larger the pressure is, the better the cutting result will be.

Fabric Engraving : Not too large not too small.

Acrylic Cutting: Increase pressure a little for those under 2mm.

Decrease it if acrylic is beyond 2mm to prevent possible error.

Acrylic Engraving: Small pressure is ok to get transparent result.

Double Color Board Cutting: Large pressure is necessary to prevent from black edge.

Double Color Board Engraving : Never use large pressure.

Wood Cutting: Must use large air pressure.

Wood Engraving: Not too large not too small.



80W Laser Tube Cutting Parameter (Reference Photo No.4)										
Lens f63.5	Speed (mm/s)		Powe	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power						
1mm	60	35-100	75	80	Reference Photo No. 1					
2mm	50	30-80	75	80	Reference Photo No. 1					
3mm	20	10-30	75	80	Reference Photo No. 2					
5mm	8	6-17	75	80	Reference Photo No. 2					
8mm	4	3-6	75	80	Reference Photo No. 3					
10mm	4	2-5	75	80	Reference Photo No. 3					
Lens f100	Speed	(mm/s)	Powe	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power						
1mm	55	20-90	75	80	Reference Photo No. 1					
2mm	45	15-70	75	80	Reference Photo No. 1					
3mm	15	8-28	75	80	Reference Photo No. 2					
5mm	7	5-15	75	80	Reference Photo No. 2					
8mm	4	2-6	75	80	Reference Photo No. 3					
10mm	3	2-5	75	80	Reference Photo No. 3					
12mm	2	1-5	75	80	Reference Photo No. 3					



100W Laser Tube Cutting Parameter (Reference Photo No.4)										
Lens f63.5	Speed	(mm/s)	Pow	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power						
1mm	100	40-130	75	80	Reference Photo No. 1					
2mm	60	30-90	75	80	Reference Photo No. 1					
3mm	25	10-40	75	80	Reference Photo No. 2					
5mm	12	8-20	75	80	Reference Photo No. 2					
8mm	5	2-7	75	80	Reference Photo No. 3					
10mm	4	2-6	75	80	Reference Photo No. 3					
Lens f100	Speed	(mm/s)	Pow	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power						
1mm	60	30-100	75	80	Reference Photo No. 1					
2mm	30	20-50	75	80	Reference Photo No. 1					
3mm	15	10-30	75	80	Reference Photo No. 2					
5mm	10	7-15	75	80	Reference Photo No. 2					
8mm	5	2-9	75	80	Reference Photo No. 3					
10mm	4	2-6	75	80	Reference Photo No. 3					
12mm	3	2-5	75	80	Reference Photo No. 3					
15mm	1.5	1-3	75	80	Reference Photo No. 3					



135W Laser Tube Cutting Parameter (Reference Photo No.4)										
Lens f63.5	Speed (mm/s)	Powe	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power	1					
1mm	100	40~150	75	80	Reference Photo No. 1					
2mm	60	30~90	75	80	Reference Photo No. 1					
3mm	25	10~35	75	80	Reference Photo No. 2					
5mm	12	8~18	75	80	Reference Photo No. 2					
8mm	6	3~9	75	80	Reference Photo No. 3					
10mm	5	3~7	75	80	Reference Photo No. 3					
Lens f100	Speed (mm/s)		Powe	er (%)	Remarks					
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power]					
1mm	60	40~120	75	80	Reference Photo No. 1					
2mm	50	30~75	75	80	Reference Photo No. 1					
3mm	20	10~30	75	80	Reference Photo No. 2					
5mm	10	8~15	75	80	Reference Photo No. 2					
8mm	6	3~10	75	80	Reference Photo No. 3					
10mm	5	3~7	75	80	Reference Photo No. 3					
12mm	4	2~6	75	80	Reference Photo No. 3					
15mm	2.5	1~4	75	80	Reference Photo No. 3					
20mm	1	1~2	75	80	Reference Photo No. 3					



	300W Las	ser Tube Cuttin	g Parameter (R	eference Photo	No.4)
Lens f63.5	Speed (mm/s)		Powe	er (%)	Remarks
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power	
1.9mm with paper	80	30-120	80	85	Reference Photo No. 1
3.4mm with paper	40	10-70	80	85	Reference Photo No. 2
4.7mm with	20	8-30	80	85	Reference Photo No. 2
8mm with paper	10	3-15	80	85	Reference Photo No. 3
9.7mm without paper	7	3-10	80	85	Reference Photo No. 3
Lens f100	Speed	(mm/s)	Powe	er (%)	Remarks
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power	1
1.9mm with paper	70	30-110	80	85	Reference Photo No. 1
3.4mm with	40	10-62	80	85	Reference Photo No. 2
4.7mm with	18	8-28	80	85	Reference Photo No. 2
8mm with paper	10	3-15	80	85	Reference Photo No. 3
7mm without paper	7	3-10	80	85	Reference Photo No. 3
.6mm without pape	• 3	1-6	80	85	Reference Photo No. 3
0mm without paper	2	1-3.5	80	85	Reference Photo No. 3
25mm without paper	1	0.8-2	80	85	Reference Photo No. 3





Work	Coutput Doc User	Test	Transform
Ξ	Cut parameters		^
	Idle speed(mm/s)	200.00	
	Idle Acc(mm/s2)	1000.0	0
	Start speed(mm/s)	15.000	=
	Min Acc(mm/s2)	800.00	
	Max Acc(mm/s2)	1000.0	
	Cutting mode	Normal	Cutting
	Acc Mode	S mode	
Ξ	Sweep parameters		
	x Start Speed(mm/s)	40	
	y Start Speed(mm/s)	15.000	
	x Acc(mm/s2)	5000.0	0
	y Acc(mm/s2)	2000.0	00
	Line Shift Sneed (mm/s)	150.00	n 💌

Worl	Output	Doc	User	Test	Transfe	orm
	Cut param	neters				^
	Idle speed	200.00)			
	Idle Acc(n	nm/s2)		1000.0)0	
	Start spee	ed(mm/	's)	5.000		
	Min Acc(m	1m/s2)		300.00)	
	Max Acc(r	nm/s2)	500.00			
	Cutting m	ode		Normal Cutting		
	Acc Mode			S mode		
	Sweep pa	ramete	ers			
	x Start Sp	ieed(m	m/s)	40		
	y Start Sp	ieed(m	m/s)	15.000)	
	x Acc(mm	/s2)	5000.00			
	y Acc(mm	(s2)	2000.0	000		
	l ina Shift	Snood	(mm/s)	150.00	າດ	Y

Work	Output Doc I	Jser	Test	Transform	
	Cut parameters			~	
	Idle speed(mm/s)	200.00)		
	Idle Acc(mm/s2)		1000.0	0	
	Start speed(mm/s)		5.000	=	
	Min Acc(mm/s2)		200.00)	
	Max Acc(mm/s2)	300.00)		
	Cutting mode		Normal Cutting		
	Acc Mode		S mode	в	
Ξ	Sweep parameters				
	x Start Speed(mm/	s)	40		
	y Start Speed(mm/	s)	15.000)	
	x Acc(mm/s2)		5000.0	0	
	y Acc(mm/s2)		2000.0	000	
	Line Shift Sneed (m	nm/s)	150.00	חר 💌	

Photo 1

Photo 2

Photo 3





135W Glass Tube Plywood Cutting Parameter									
Lens f63.5	Speed ((mm/s)	Power (%)						
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power					
1mm	80	30-120	75	80					
3mm	40	10-70	75	80					
5mm	20	8-30	75	80					
8mm	10	3-15	75	80					
Lens f100	Speed ((mm/s)	Power (%)						
Thickness	Best Speed	Applicable Speed	Min. Power	Max. Power					
1mm	70	30-100	75	80					
3mm	30	10-50	75	80					
5mm	15	8-25	75	80					
8mm	12	5-15	75	80					
12mm	4	1-6	75	80					

60W Laser Tube Engraving Parameter (Reference Photo No. 6)										
Lens f50	Speed (mm/s)		Power (%)		Scanning Gap (mm)	Remarks				
Material	Best Speed	Applicable Speed	Min. Power	Max. Power						
Acrylic	200	10-400	18	18	0.08(0.05以上)	Reference Photo No. 5				
Double Color Board	200	10-400	18	18	0.08(0.05以上)	Reference Photo No. 5				
Wood	200	10-400	18	18	0.08(0.05以上)	Reference Photo No. 5				
Denim	200	10-400	18	18	0.25(0.05以上)	Reference Photo No. 5				



Work	Output	Doc	User	Test	Transform
	Sweep pa	ramete		~	
	x Start Sp	eed(m	40		
	y Start Sp	eed(m	15.000		
	x Acc(mm	/s2)	8000		
	y Acc(mm/s2)			2000.000	
	Line Shift Speed (mm/s)			150.000	
	Scan Mode			Common Mode	
	Facula Size(50~99%)			98.000)
	Home para	9			
	Home speed(mm/s)			80.000)
	Auto hom	еX	Yes		
	Auto hom	еY	Yes		
	Auto hom	e z	No		
	Auto hom	еU	No	*	

Photo 5



Acrylic Engraving Result



Double Color Board Engraving Result



Wood Engraving Result



Denim Engraving Result



60W Laser Tube Half-cutting Parameter

Lens f50	Speed (mm/s)		Power (%)		Remarks
Material	Best Speed	Applicabl e Speed	Min. Power	Max. Power	Min. Power is to control corner laser force while max. power take control of laser force for straight line. With improper min. power, the result won't be good, neither there is no
Wood	20	1~200	8.8	9	light nor black edge.
Double Color Board	20	1~200	8.8	9	Better not using large power laser tube
Acrylic	20	1~200	8.8	9	40w glass laser tube or RF metal laser tube will be a good option
Reflective Materials	20	1~200	8.5	8.5	HS 60W laser tube is so good as SP 60W for min. power



Thanks for your patient browsing.

