Check the "Aliasing Error": set the error of whether adjacent two nodes are taken as overlapped.

If abnormal phenomenon appears in the processing (such as fail to engrave, cut twice), use the tool to check all the data. Abnormal data checked will be shown in the color of red. You can choose to delete or edit the node.

4.4.2　　Smooth Curve.

Click the button 〰 to smooth the curve. By doing so, speed and stability of the cut will be improved. Select the data need to be processed, and click the button, dialog box appears as below:
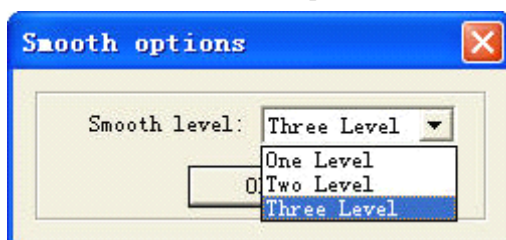
There are three levels of the smooth: regional smooth, general smooth, and overall smooth. The higher the level (with the overall smooth highest), the smoother the curve will be. However, the figure will be bigger as well.

4.4.3　　Combine the lines linked

Combine the several lines linked into one. Select data need to be processed, and click the button will do.

4.4.4　　Generate parallel lines

Click the button ☁ to expand or reduce the vector graphics. Select the data need to be processed, and then click the button, dialog box appears as below:
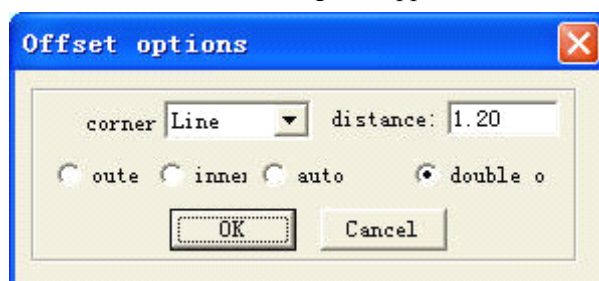
Check the needed parameter to generate parallel lines on a new lay generated simultaneously to make up for the facula, as it shows below:
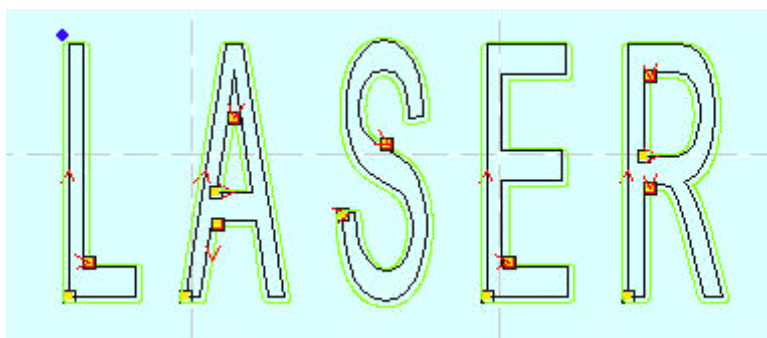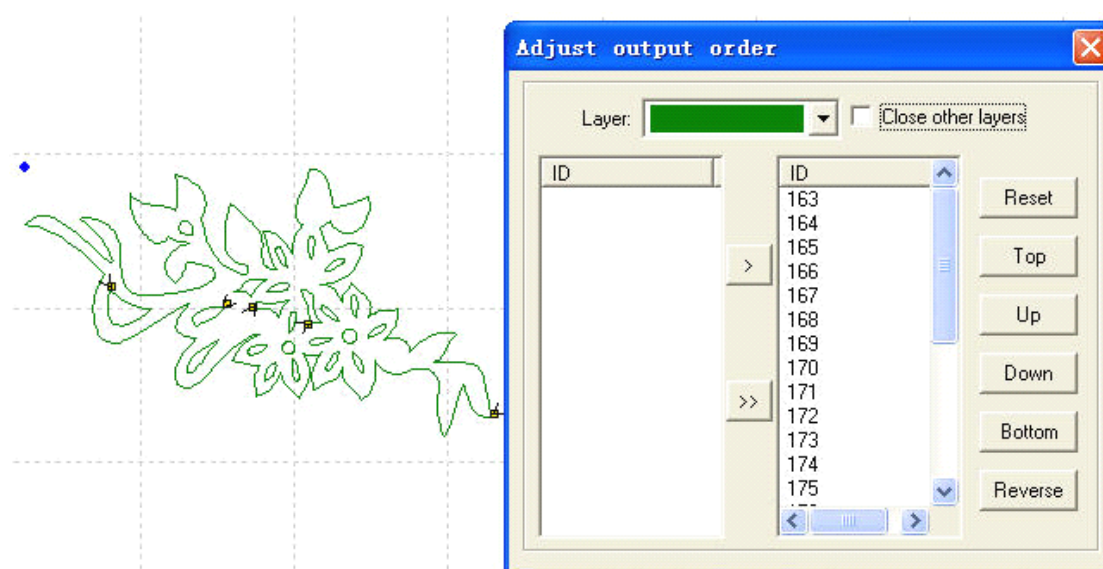
Corner type falls into two: circle or sharp. Select circle, the lines will be smoother, but small distortion will be in the corner.

4.4.5   Set Output Order

User can select the mode of the process order (eg. Original route, optimized route) in the cutting, or define the process order by this tool at will.

Click this button, dialog box appears as below:
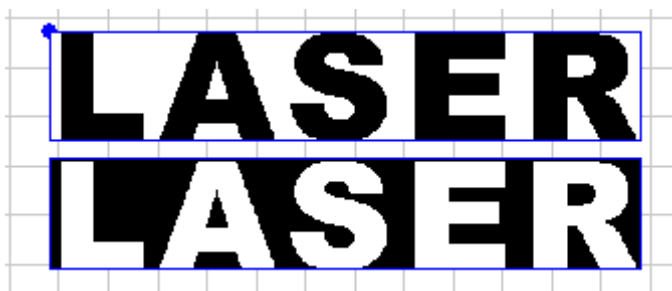

Click "Reset", select any figure, and then click "Space" or the button [>] to move the ID number representing the figure to the list on the right. Order on the right list will be the process route in the cutting.

4.4.6   Invert color of Bitmap

Click the button ▦ to invert the color of the BMP image. The process result will be intaglio or anaglyph. It appears as below:

The two pictures are before and after the color inversion.

4.4.7   Screen Print of Bitmap

This is to make the screen print of the bitmap. Engraving result of the bitmap can be changed by setting the size of the dot size and the engraving step.
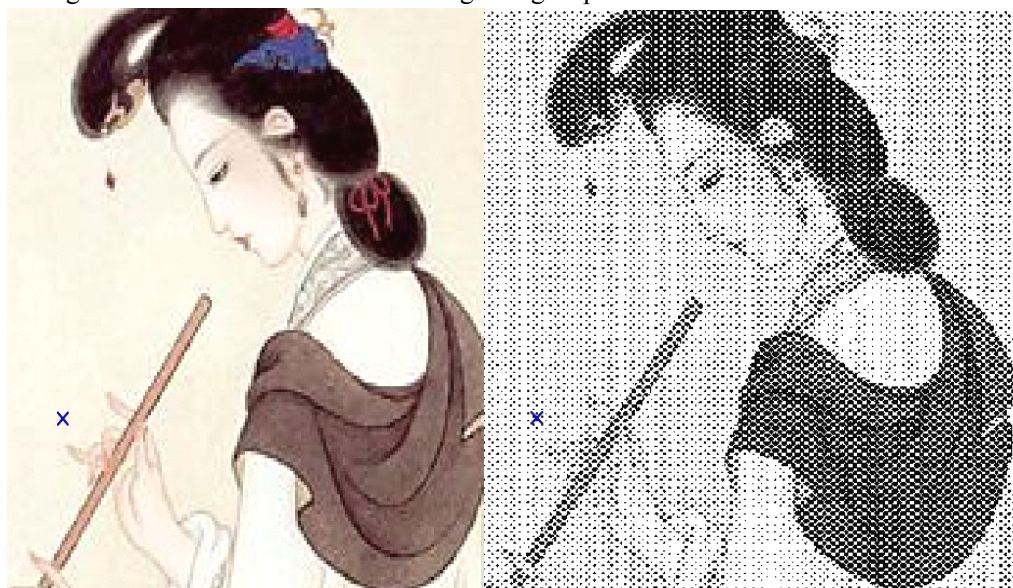

The two pictures are the before and after the screen print of the bitmap. If the user has a high requirement of the result, professional software such as "Photoshop" is suggested to process the bitmap.

4.5 Laser processing

4.5.1   Define First Cut

The corresponding icon is ⇗ .

The system will automatically define the first point (usually the crossed point of two lines) and the direction of the cut. If you need to change them, select the figure, click this button, and move the mouse to the figure, the mouse will change to a cross. Click the mouse on any point of the figure, the point will be the first point to cut. Click "F" to invert the direction of the cut. It appears as below:
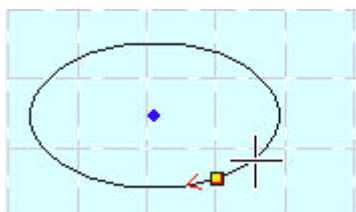
Click "Space" key at this time, you can define the lead-in/out line. It appears as below:
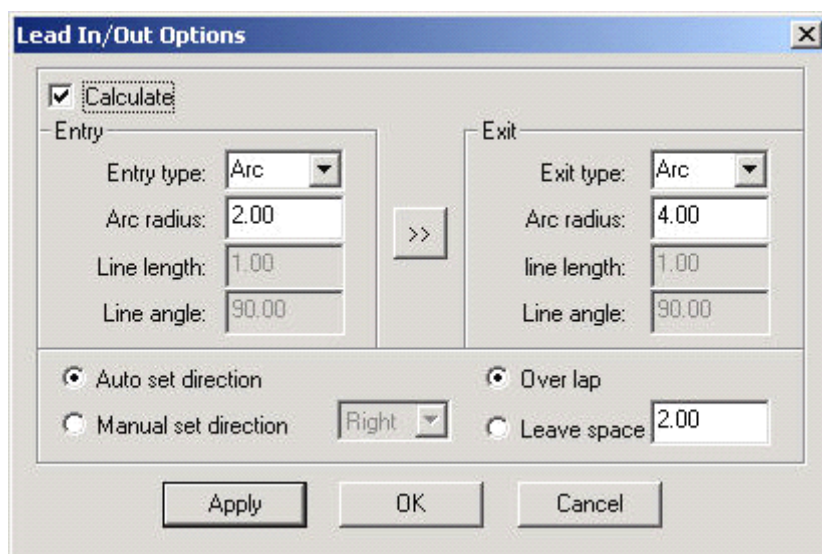
Calculation: this option can define the parameters of the lead-in/out line.
Type of Lead-in/out Line: type of the lead-in/out line fall into two: circle and sharp.
Length of Lead-in/out Line: length of the lead-in/out line
Angle of Lead-in/out Line: when the type of the lead-in/out line is sharp, the angle between the lead-in/out line and outline of the figure.

⟩⟩ : define the same parameter for the lead-out line as those of the lead-in line.

Process Enter Direction: select "Right" or "Left" in the drop-down list to define whether the lead-in/out line is in the outline of the figure or not.
Seal/gap: this option defines whether to seal or leave a gap of the process figure. The overlap length of the seal and the length of the gap can be defined by the number on the right.
The following is a sample of the parameter setting:
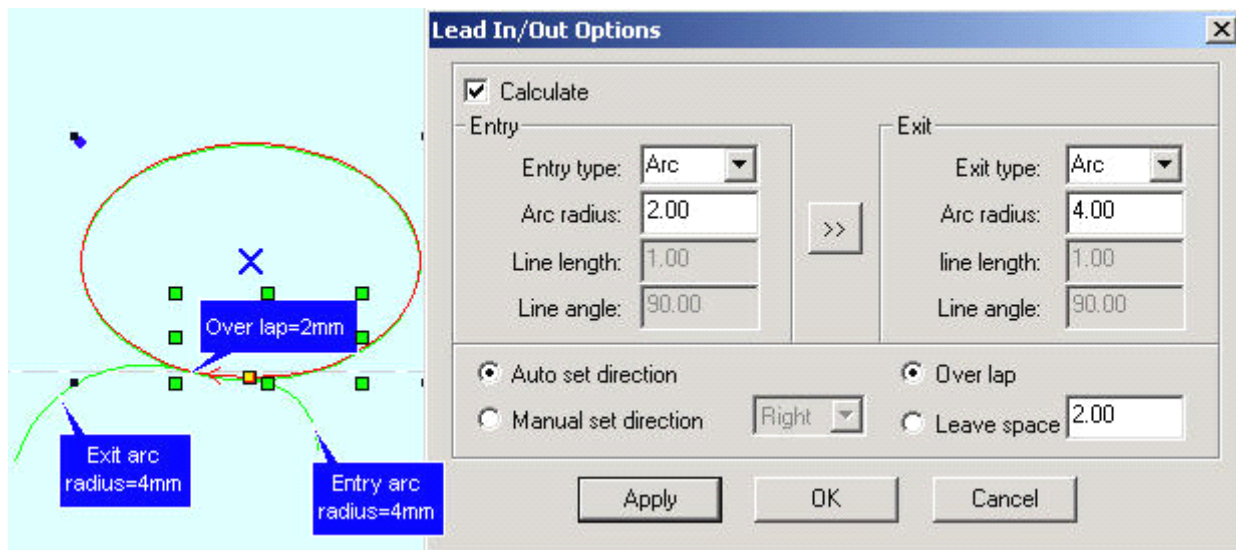
4.5.2   Set the Stop Point of the Laser Head

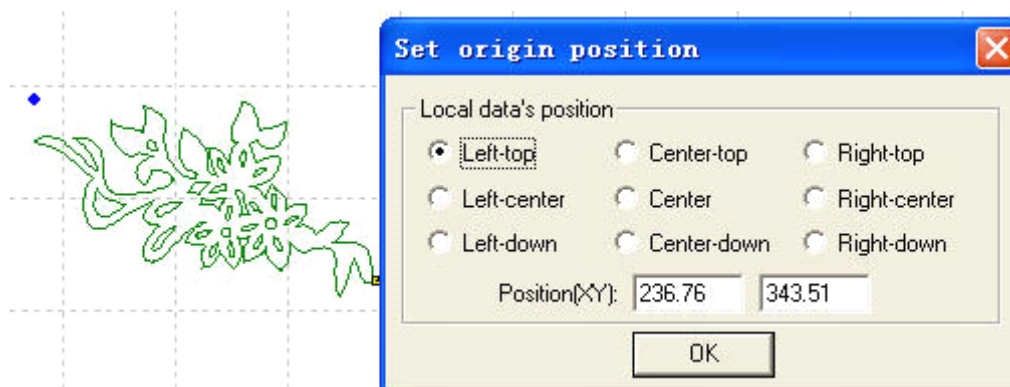The corresponding icon is ✎.

The laser head will be at the point when the original point is corrected or back to original or after the data is processed. Click the button, the mouse arrow will change into a circle, dialog box appears as below:

You can define the position of the left and right bottom as you need; move the mouse to any point to define the original point; input the position (x, y) to define the original point precisely.

4.5.3   Array Process Parameter

Click the button ⋮⋮, dialog box appears as below:
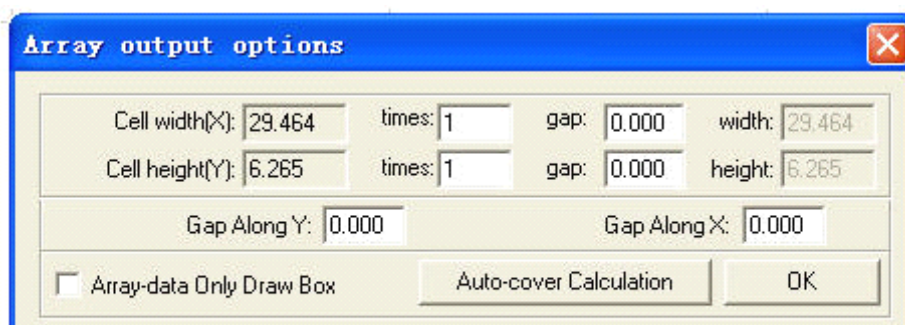
Cell width (X): origin size of the processing data.

Cell height (Y): origin size of the processing data.

Number: lines or columns needed for the Output data.

Gap：gap between lines or columns.

Total Width：width of the whole data after arraying.

Total Height：height of the whole data after arraying.

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

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

Array-data Only Box: 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:
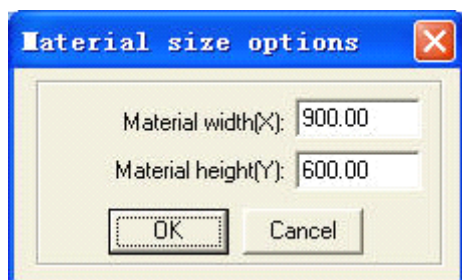
**Material Height**: length of the materials to process (default as the length of the worktable)

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

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.

The following is a sample setting of the array parameter:
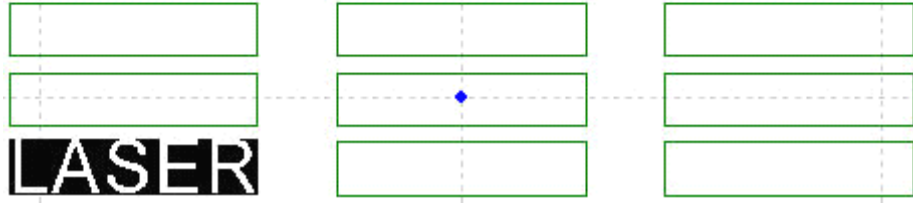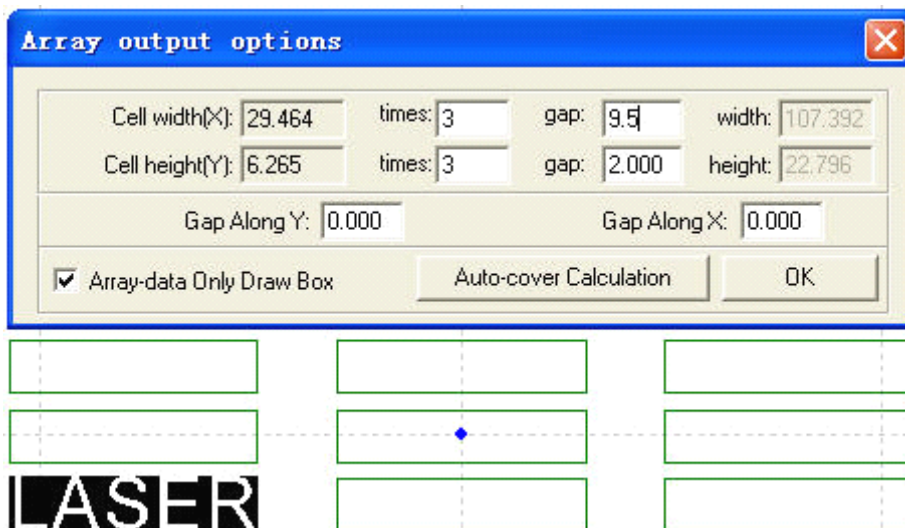
4.5.4   Calculate Process Path

Click this button to save the parameter when the figure or the process parameter is changed.

4.5.5   Clear Process Log

Click this button to clear the process log in the status bar.

4.5.6   Simulate Process Output

The corresponding button is .

Click the button after the process parameter is set, simulate output will begin and the result of the output can be checked. Speed of the simulate output can be set at will. Click "Esc" button to end the simulate display.

4.5.7   Set Simulate Speed

In order to observe the process path, you can click the button to set the simulate speed.

Click the button, it appears as below:
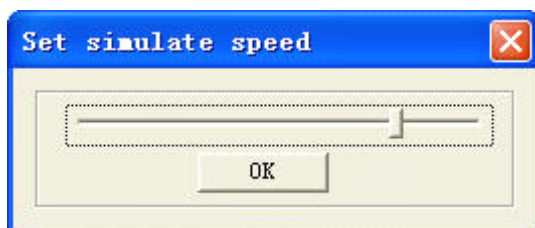
4.5.8 Simulate Operating Time

Click the button to show information as the estimated operating time.

4.6 View

4.6.1   Toolbar
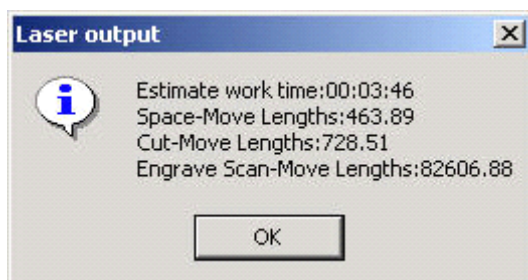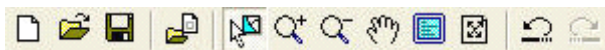
4.6.1.1   File Toolbar

Click the button, to show or hide the file toolbar. It appears as below:

4.6.1.2   Output Toolbar

Click the button, to show or hide the output toolbar. It appears as below:

4.6.1.3   Edit Toolbar

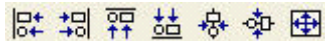Click the button to show or hide the edit toolbar. It appears as below:

4.6.1.4   Layer Toolbar

Click the button to show or hide the layer toolbar. It appears as below:

4.6.1.5   Align Toolbar

Click the button to show or hide the align toolbar. It appears as below:

4.6.2   Status Bar

Click the button to show or hide the status bar. It shows information such as the process log, coordinate position, etc. It appears as below:

ready   X=756.09 Y=997.50 Worked times:00:00:00[finished:0 times]

4.6.3   Console

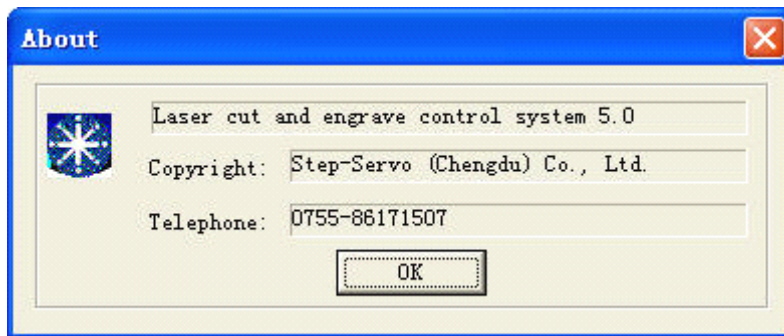Show/hide the control panel on the right of the software interface.

4.7 Help

4.7.1   Help

Click the button to enter the help files. You can look up the user's guide of each function with ease.

4.7.2   About

Click the button, dialog box appears as below:

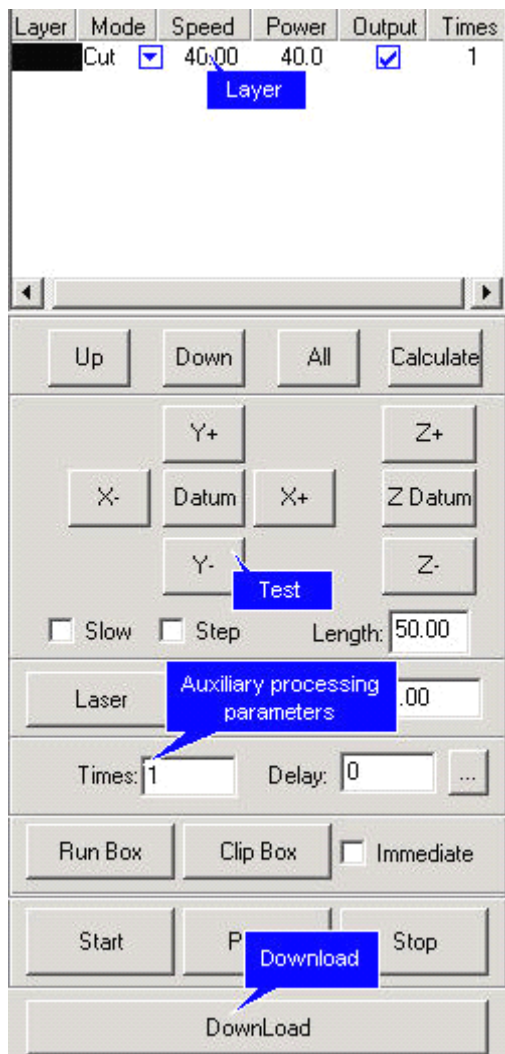It shows the version information and the contact number of the provider. Please feel free to contact us if you have any problem.

5 Laser Output

Laser Output interface consists of three parts: layer management, control panel, and offline files (download data)

Layer	Mode	Speed	Power	Output	Times
	Cut ▼	40.00	40.0	✓	1

Layer

Up Down All Calculate

Y+ Z+

X- Datum X+ Z Datum

Y- Z-

Test

☐ Slow ☐ Step Length: 50.00

Laser Auxiliary processing parameters .00

Times: 1 Delay: 0 ...

Run Box Clip Box ☐ Immediate

Start P Download Stop

DownLoad

5.1 Layer Management

5.1.1   Main Interface of Layer Management

It appears as below:

Layer	Mode	Speed	Power	Output	Times
	Cut ▼	40.00	40.0	✓	1
	Engra ▼	400.00	50.00	✓	1
	Grade ▼	250.00	80.00	✓	1
	Hole ▼	--	50.0	✓	1

Up Down All Calculate