



## Software Manual

### Rayjet Commander 2.3 For Rayjet 50





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# 1 Introduction

Rayjet Commander contains all necessary software to transfer your designs from your typesetting software to the Rayjet Engraver.

After reading this manual you know how to:

- Install the software
- Set up CorelDraw (X3) for the use with Rayjet
- Create and produce a first stamp in CorelDraw (X3)
- Adjust the settings of the Corel Printer Window
- Adjust the settings of the Rayjet Commander Printer Window
- Work with the Rayjet MiniManager



## 2 First Steps

### 2.1 Installation

System requirements:

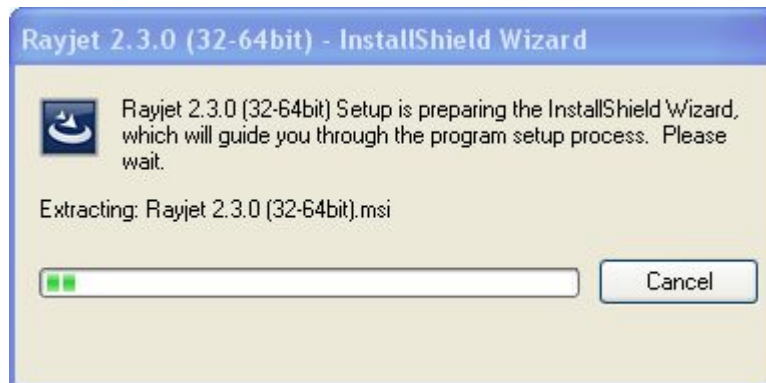
- Windows 7® 32/64-bit or  
Windows Vista® 32/64-bit (with Service Pack 1 or later) or  
Windows® XP 32/64-bit (with Service Pack 2 or later)
- Microsoft® .NET framework 3.5
- 512 MB of RAM, 400 MB of hard disk space
- Pentium® 1 GHz processor or AMD Athlon™ XP
- 1024 x 768 or better monitor resolution
- 24-bit color depth graphics card
- 1 free USB interface
- CD drive
- Mouse

Insert your DVD. In case auto run is activated, the installation procedure will start automatically.

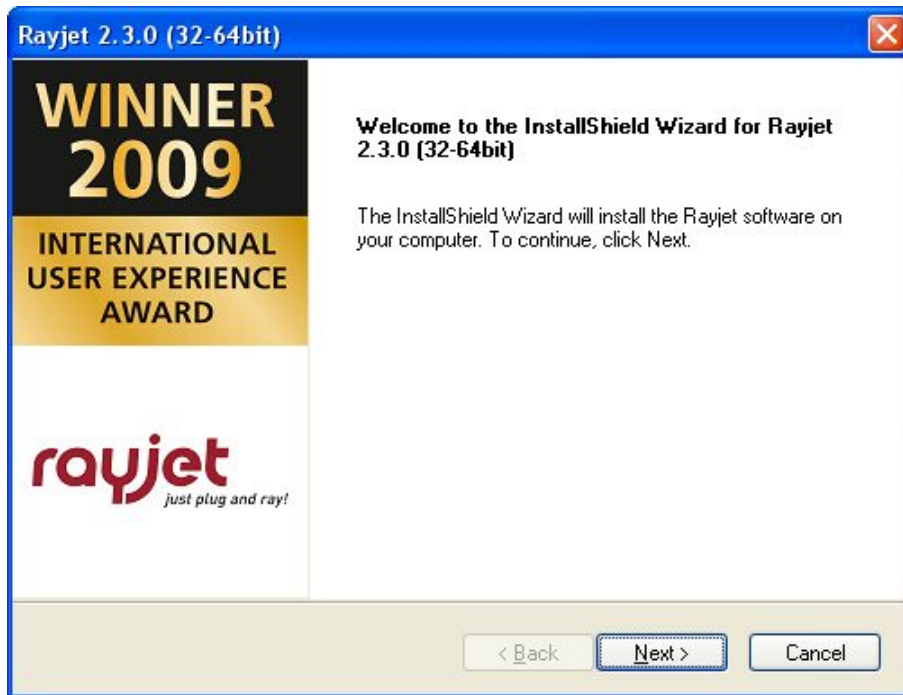
If auto run does not work, open the directory of the installation DVD and double click on “start.bat”.

Name	Size	Type	Date Modified
_Setup_preconditions		File Folder	13.01.2011 08:24
Rayjet 2.3.0 32-bit		File Folder	12.10.2010 10:09
Rayjet 2.3.0 64-bit		File Folder	12.10.2010 10:08
Autorun.inf	1 KB	Setup Information	30.09.2010 10:58
RJ icon.ico	4 KB	Icon	30.09.2010 12:08
start.bat	1 KB	MS-DOS Batch File	30.09.2010 11:01

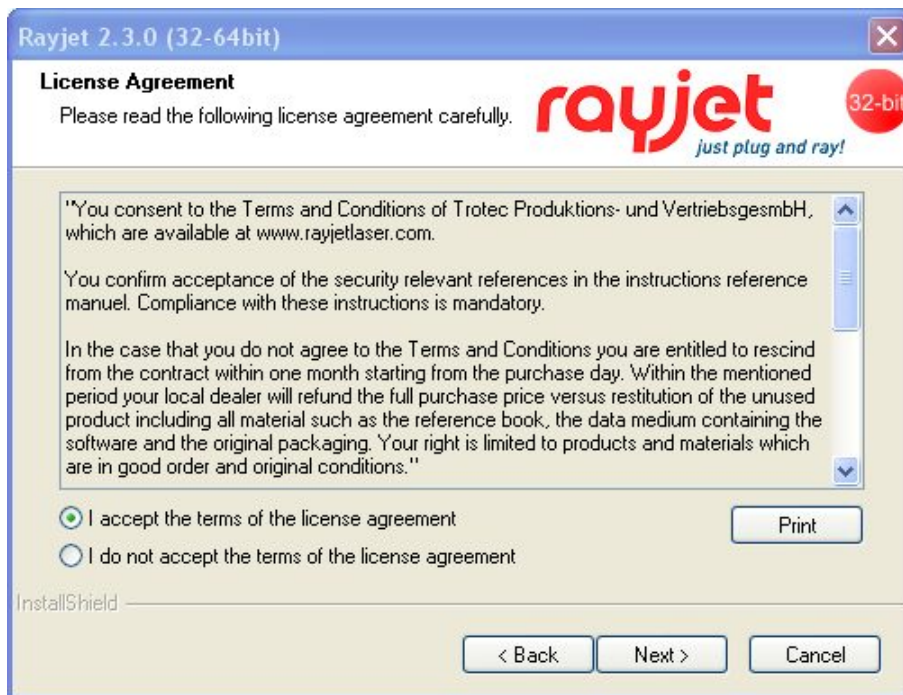
The InstallShield Wizard shows up and starts to extract the right installation files.



Wait until the InstallShield Wizard has prepared the System for installation.

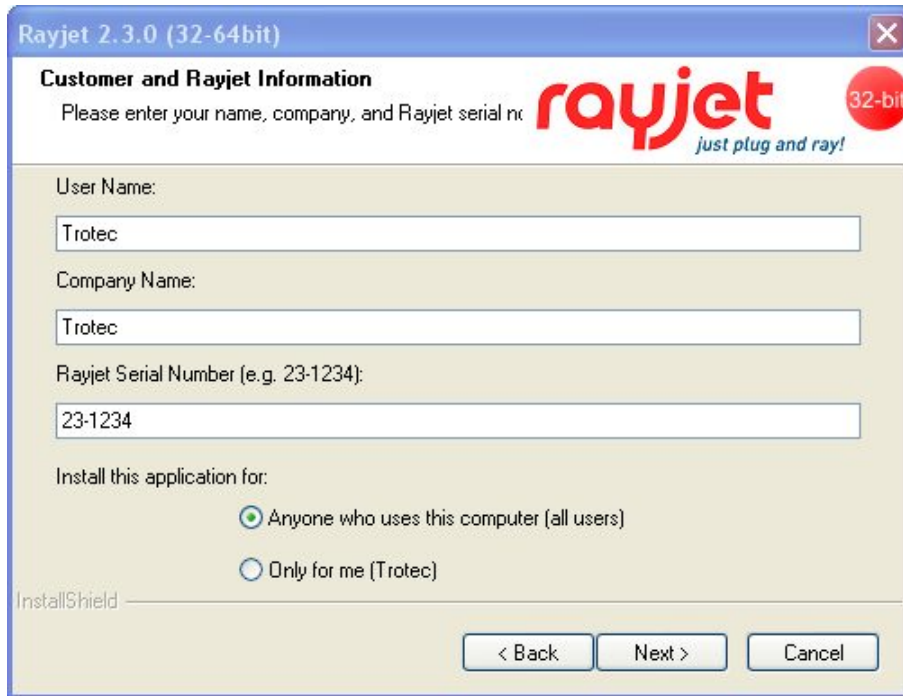


Press **“Next”**.

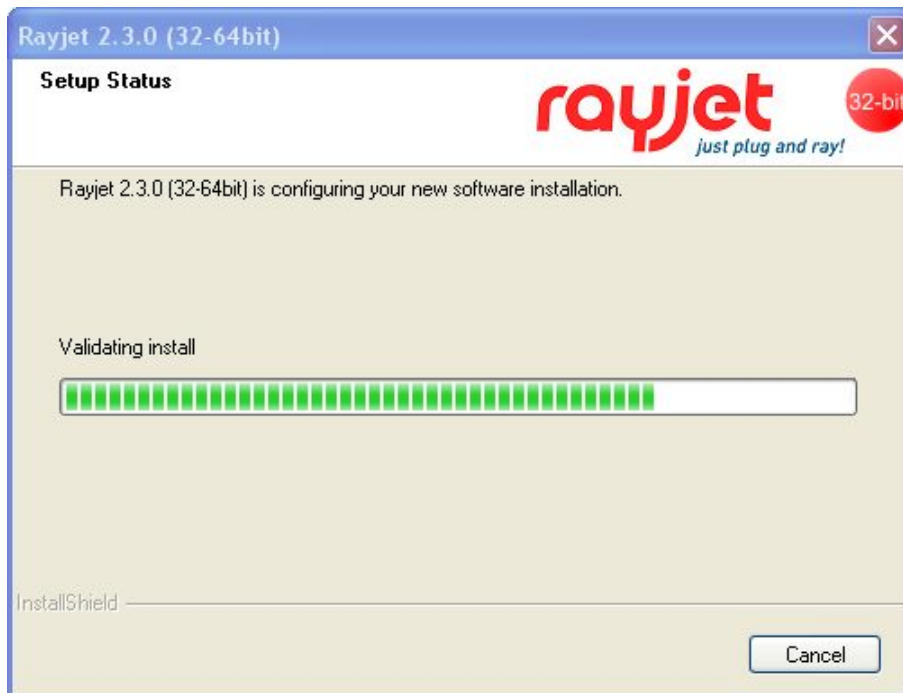


To continue with the installation you have to check **“I accept the terms of the license agreement”** and press **“Next”**.





Enter the requested data and click on "Next".



Wait while the setup is running.





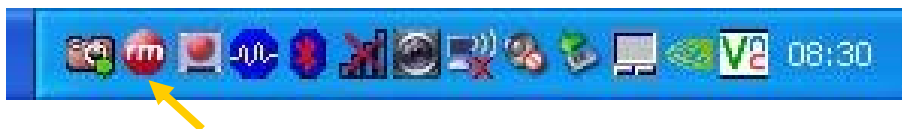


Please check if you want to restart your computer now or later and press **“Finish”**.

After the installation you will find a shortcut to MiniManager on your desktop. Double click on the icon to start the software.



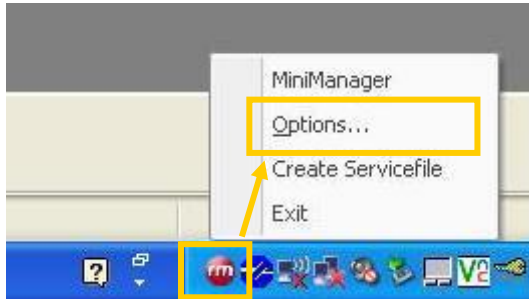
After the start of MiniManager, you will find a small Rayjet MiniManager icon  in your task bar.



For unrestricted use of the Rayjet you have to enter a license key as described in section 2.3 Software registration.

## 2.2 Options – first settings

To enter the “Options” right-click on the small red Rayjet-icon on the task bar when MiniManager is active.



In the first two drop-down fields select your language and the distance-unit you prefer. Click on “Apply” and “OK”.



### 2.3 Software registration

The following procedure is only necessary for pay per use machines.



Start MiniManager via double click on the link on your desktop.

The MiniManager icon shows up in your task bar.



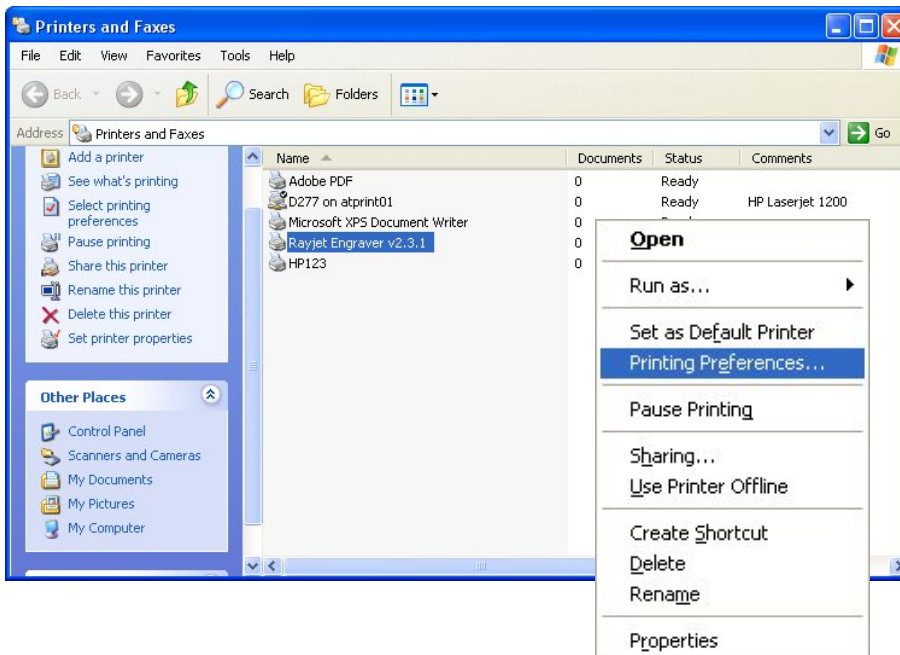
Switch on the Rayjet and wait until it is connected.



Open your printer and faxes window via “Start” and selecting “Printers and Faxes”



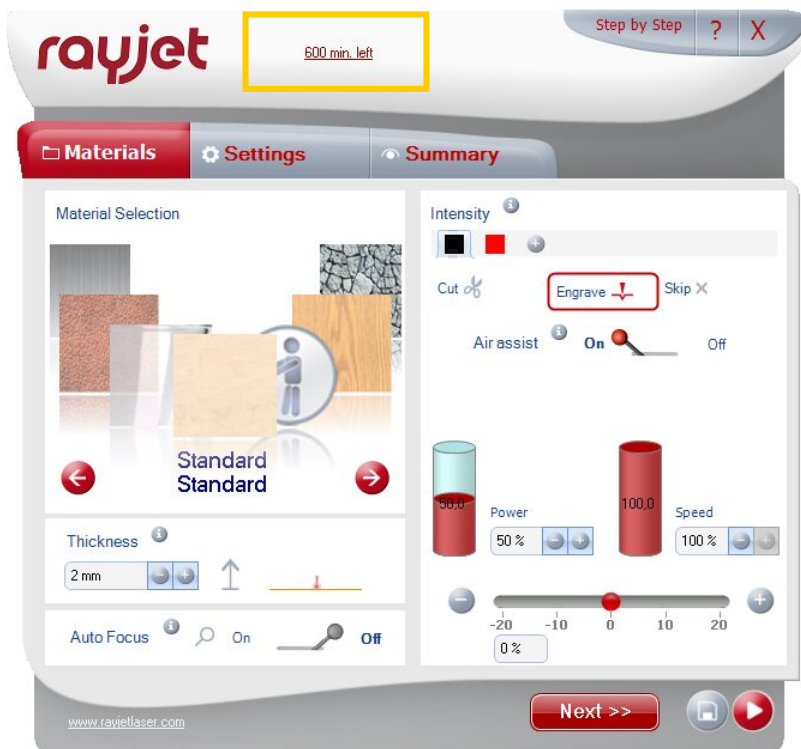
Access the context menu of “Rayjet Engraver” via right mouse-click and select “Printing Preferences”.





### First Steps

In the top section you will see a link like “600 min. left”. Click on it to get access to the validation screen.

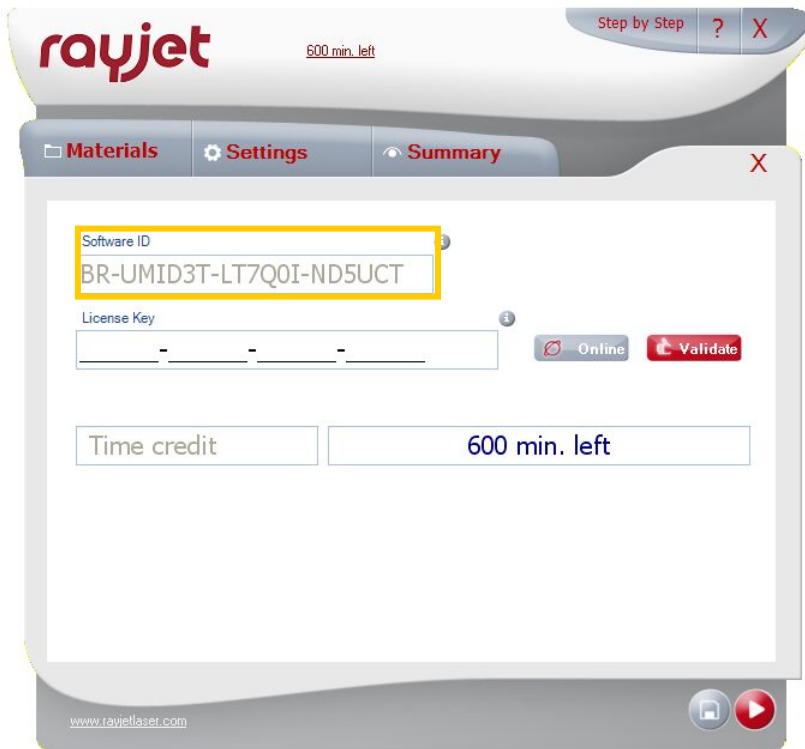


The following screen shows up, when MiniManager is not started and/or Rayjet is turned off. The software ID-box is full of “X”.





The following screen shows up, when MiniManager is started and Rayjet is turned on. Mark and copy the software ID (Ctrl-C) and send it to your Rayjet distributor. Your distributor will organize the License key for you. In the meantime you can work for 600 min without a license key.



When you received the license key, get access to the validation screen as described above and paste the key to the input box (Ctrl-V). Then click on "Validate".





During the validation process you will see the following screen.



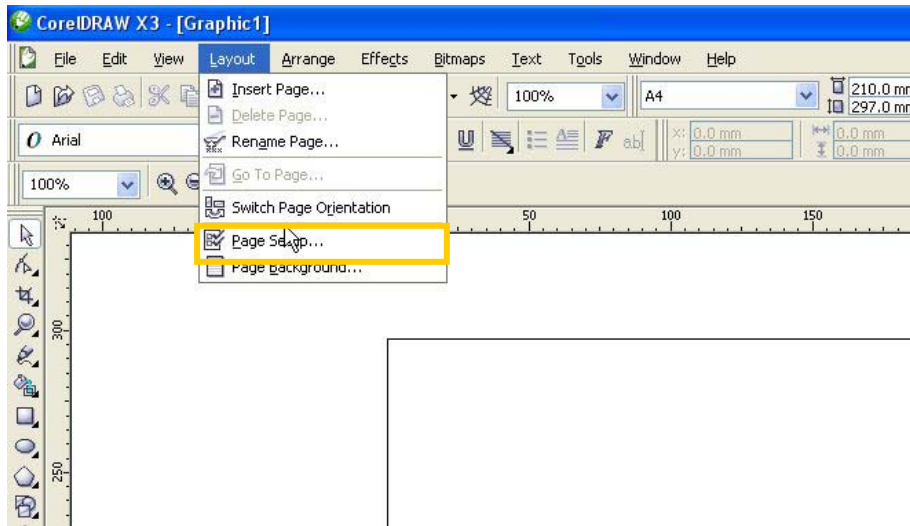
When the validation is finished, you will see the following screen and “Unlimited use” is written on the top and on the right bottom of the screen.



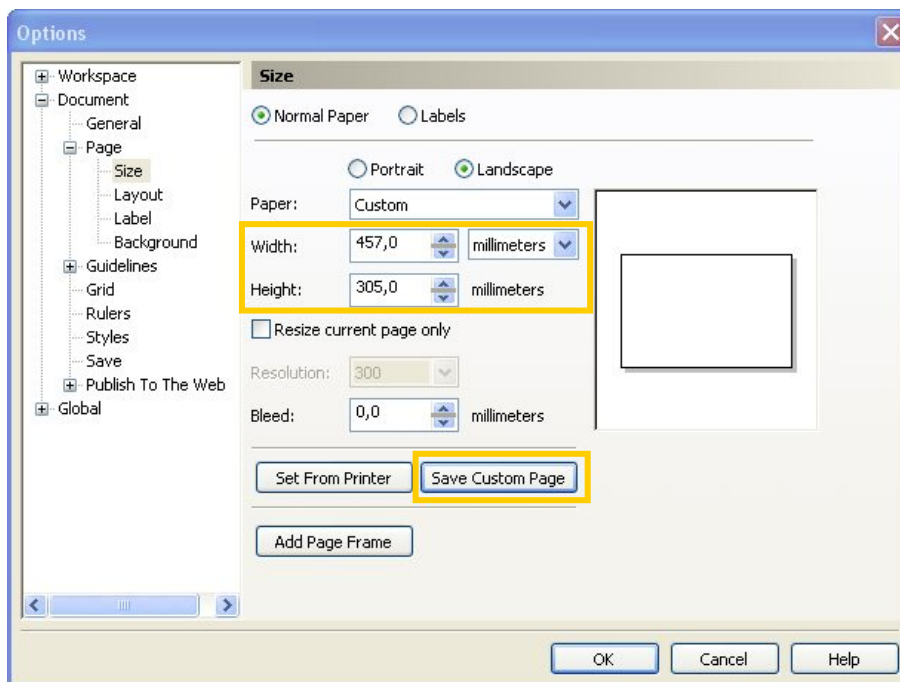
## 2.4 Set up CorelDraw ® (X3)

Open CorelDraw ®

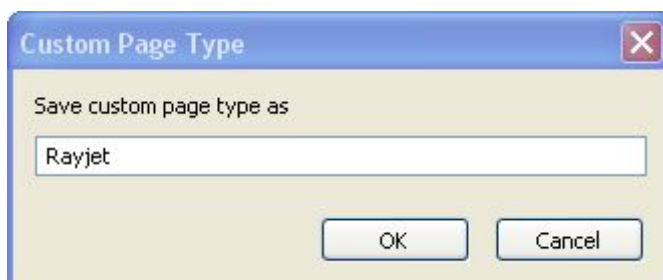
Open the menu “Layout” and select “Page Setup”



In the page setup set the size to the working area dimensions (457 x 305 mm for Rayjet 50) and click on “Save Custom Page”



Enter a Name for the new page (e.g. “Rayjet”) and click on “OK”.

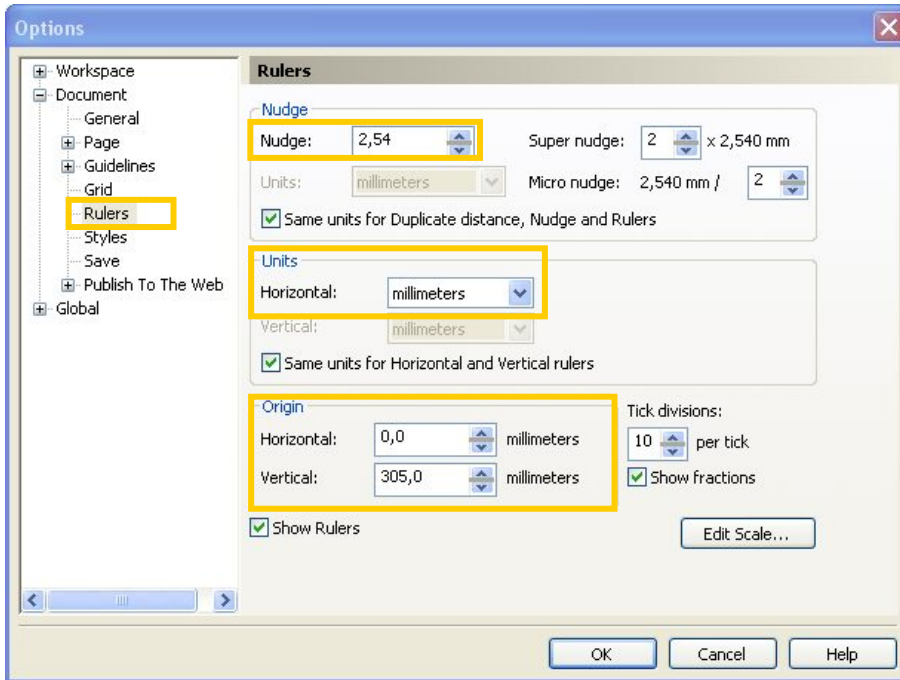


First Steps

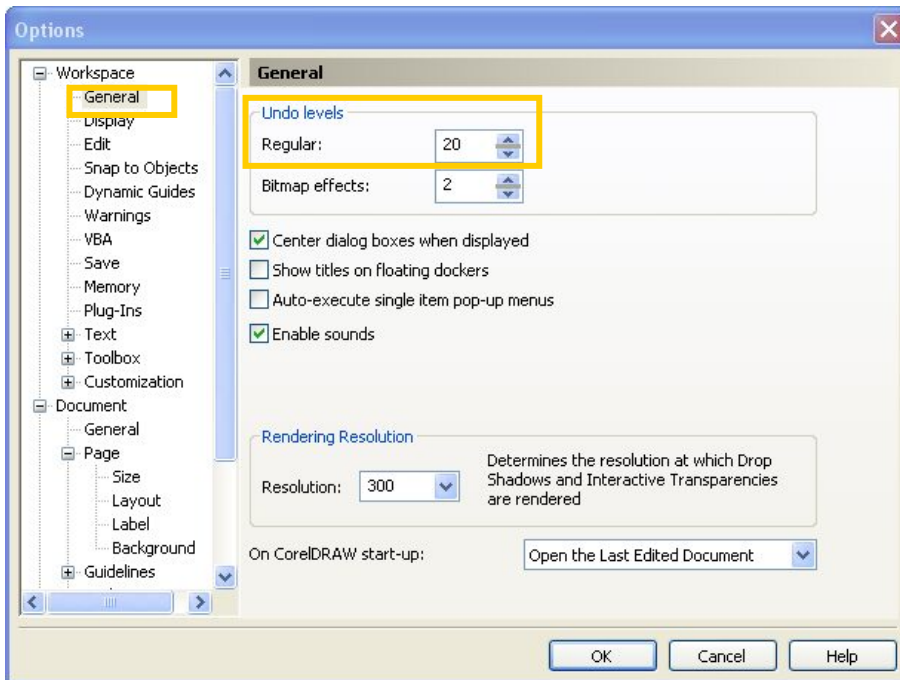
Click on “Rulers” in the explorer on the left and change the vertical Origin to 305.0 mm for Rayjet 50.

Set the “Units” to your desired value.

Additionally, you might change the “Nudge” to e.g. 1mm. This value determines the distance a selected object is moved when you hit the arrow keys on the computer keyboard.

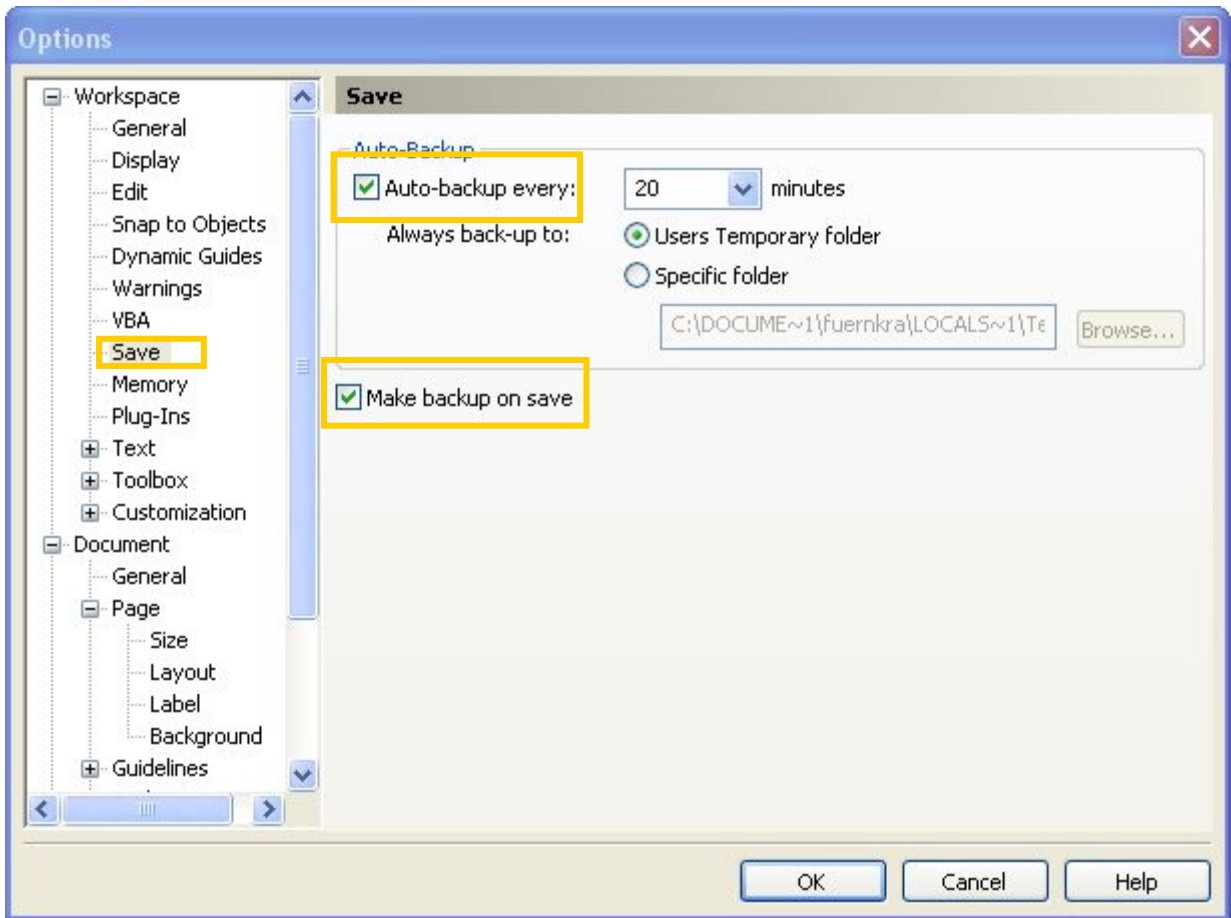


Open “Workspace” and click on “General” in the explorer. The CorelDraw standard undo-value of 20 is most times not sufficient. It is recommended to rise this value to 100 or even higher.



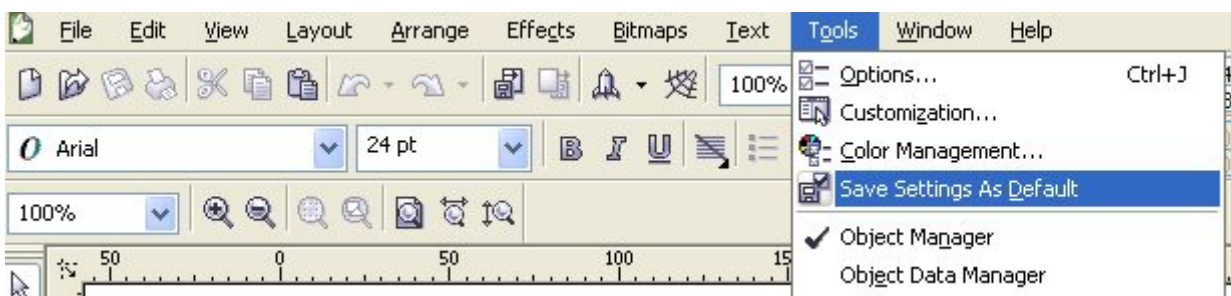


Click on “Save” to adjust the Auto-backup interval or turn off auto backup and backup on save completely. You save the most hard disk space, when you deselect both checkboxes.

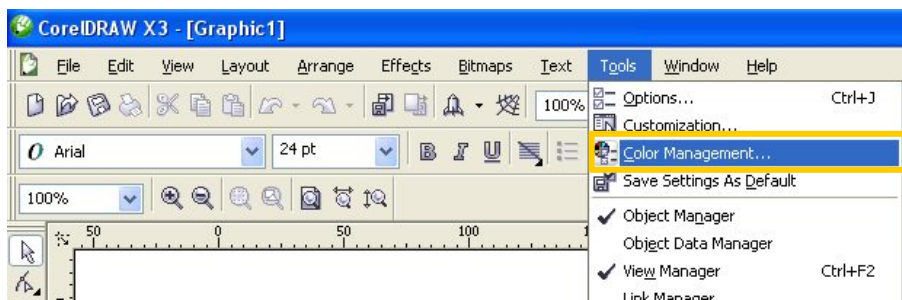


Save and close the options window with “OK”.

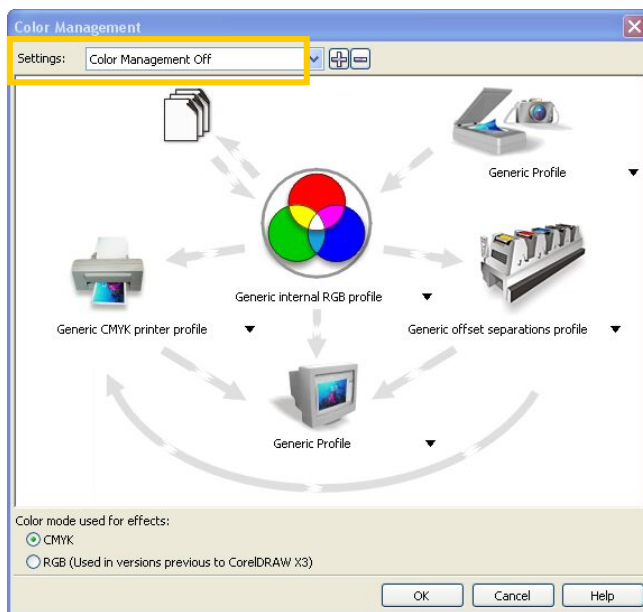
In the menu “Tools” click on “Save Settings As Default”.



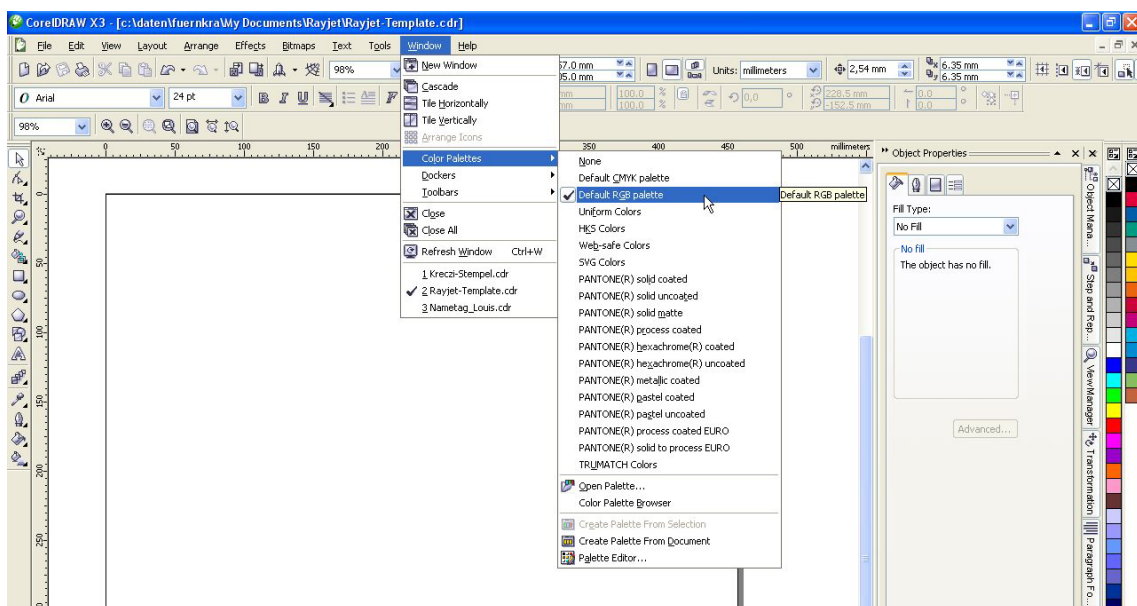
In the menu “Tools” select “Color Management”.



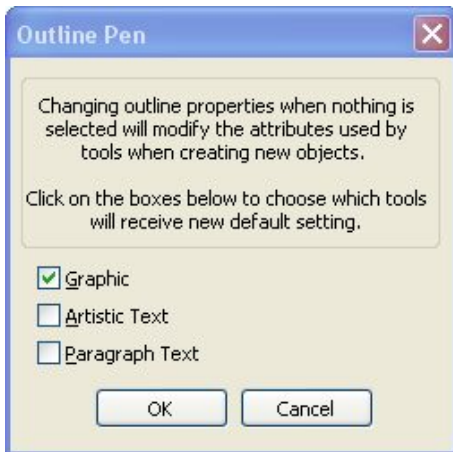
Select “Color management Off”.



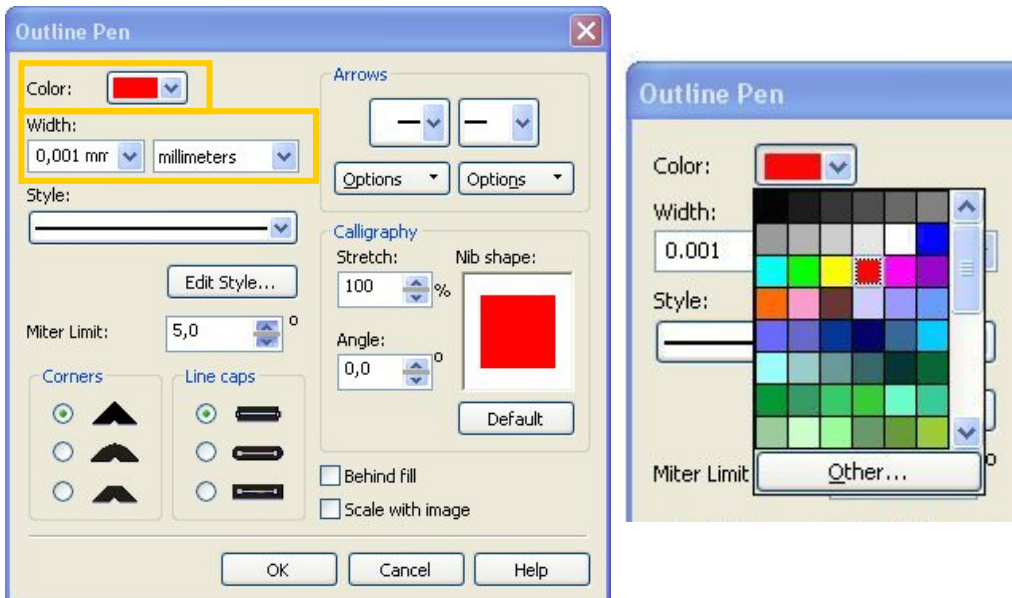
In the menu “Window” select “Color Palettes” and activate “Default RGB palette”.



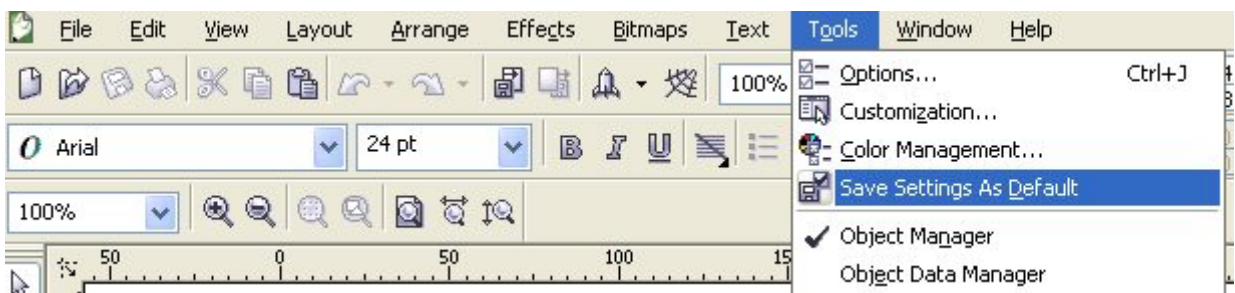
Open the “Outline Pen Dialog” with function key F12. Select “Graphic” and proceed with “OK”.



Set color to “red” and width to 0.001mm. Proceed with “OK”.



In the menu “Tools” click on “Save Settings As Default” to keep the settings for all future designs.



When you open files saved without those settings (from customers or files created before default setting) you might have to check and correct the settings. This is the reason to really keep this manual handy at your work place.

## 2.5 Applications


The following pages will show you how to produce the first samples.

### 2.5.1 Sign engraving

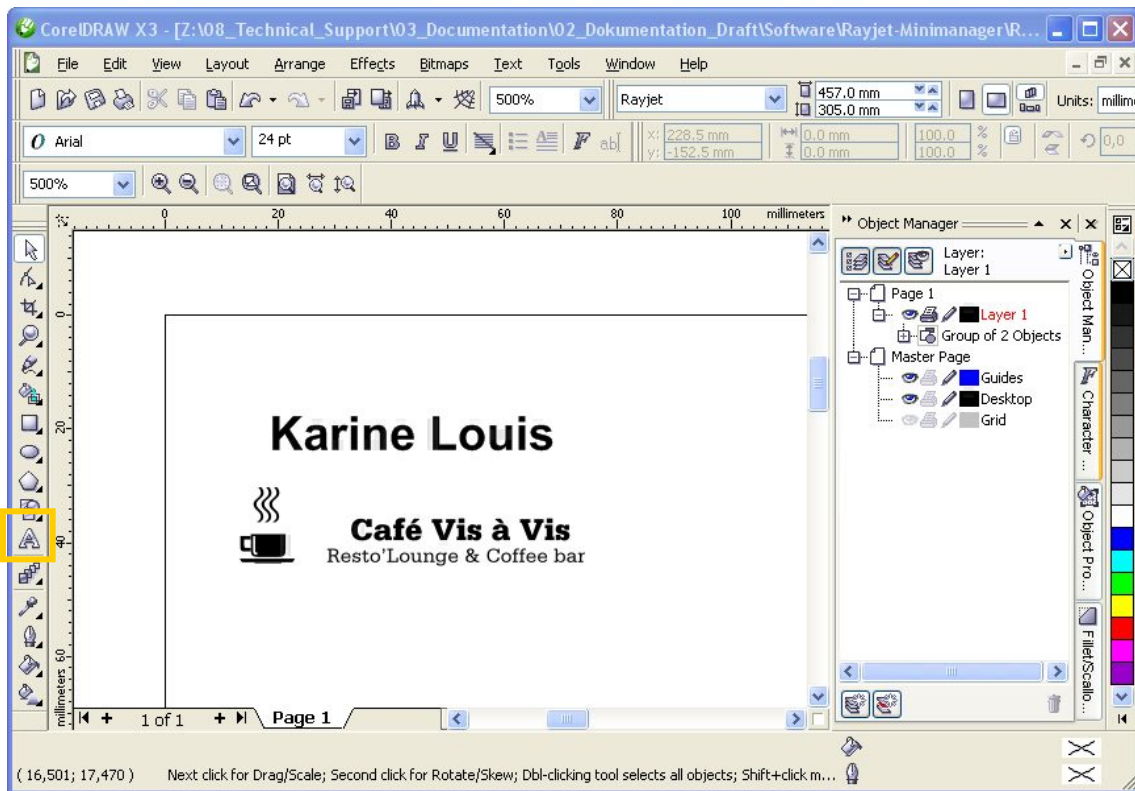
Open Corel Draw



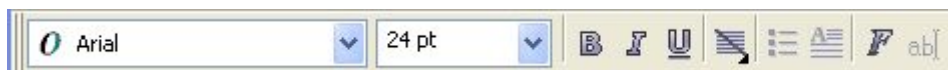
Generate your text and/or logo.


Click on the text symbol  in the Tool box, then click on the page area. A text field opens.

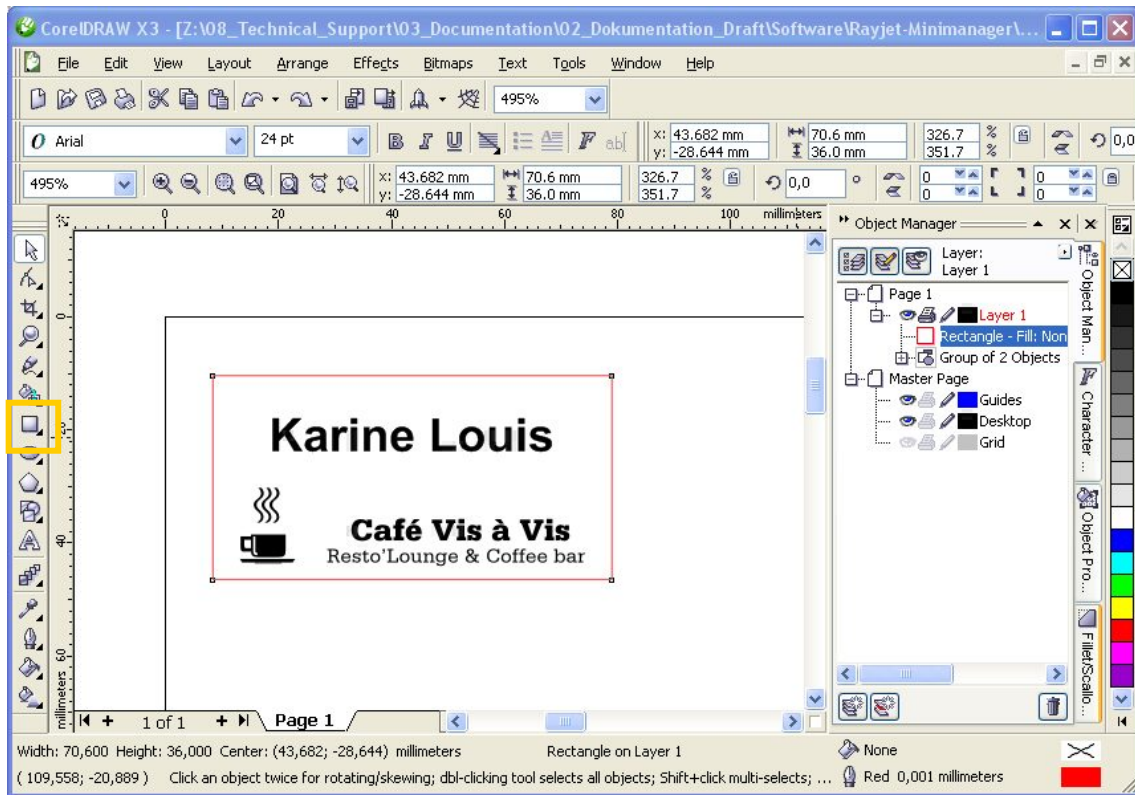
Type in Text and add additional text fields if necessary (check out the video on your Rayjet DVD for further details on each step).



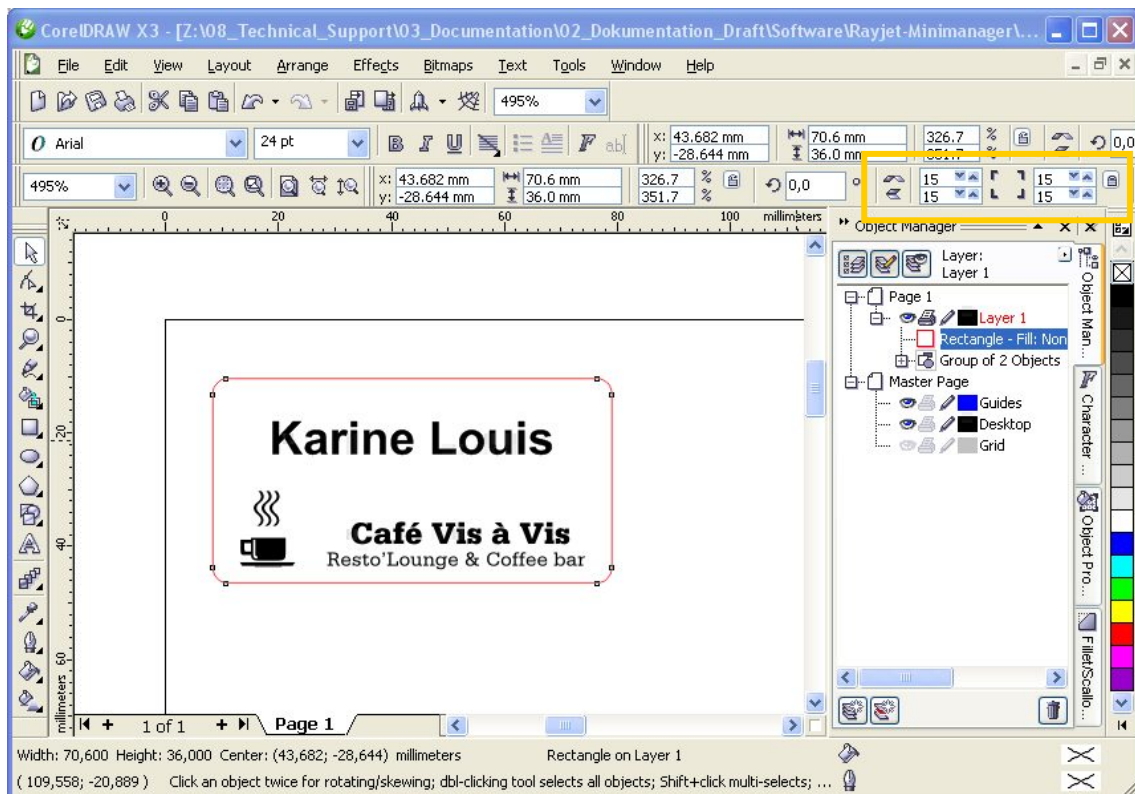
To edit texts, use the text editing toolbox. You can select different fonts, size, styles etc.



When your tag is designed, add a cutline with color red (RGB 255/0/0) and line thickness 0.001mm. In the first step, select the rectangle tool  in the tool box. Click and hold at the top left position, release the mouse button on the bottom right position.

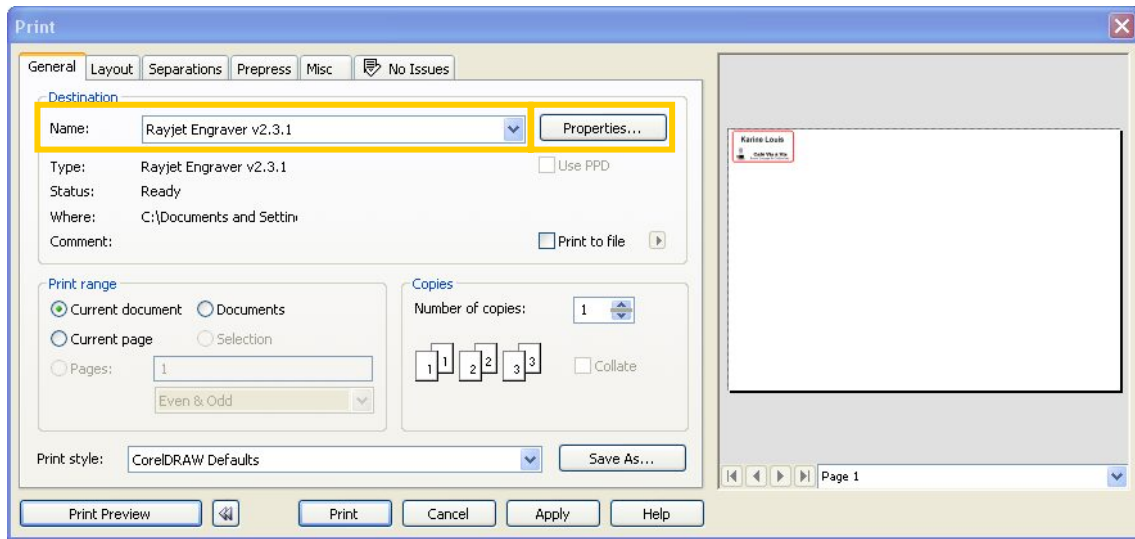


To round the edges of the rectangle, enter e.g. 15 to the “round edges” area in the “object editor”.



To send the object to the laser machine, open the menu “File” and click on “Print”.

The Corel Print-Dialogue opens. Select “Rayjet Engraver ...” and click on “Properties”.



The Rayjet Commander opens (for detailed information check out section 3 “The Rayjet Commander Interface”)



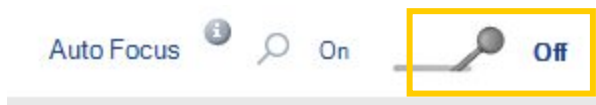
Click on the red arrow buttons to slide through the different material groups. Click on the sheet of a material group and select the material which is most similar to the material you use for the sign.



The standard thickness of the material will show up – this value is very important if you want to use auto focus. Correct the value if necessary.



Turn the auto focus off for the first sign. For further use, read section “3.1.3 Auto Focus”.



To focus manually, turn Rayjet on and put the material (LaserMax) in the upper left corner. Place the focus tool above your material on the x-axis housing. Then move the table up by using the "up" key for the z-axis on the Rayjet keypad.

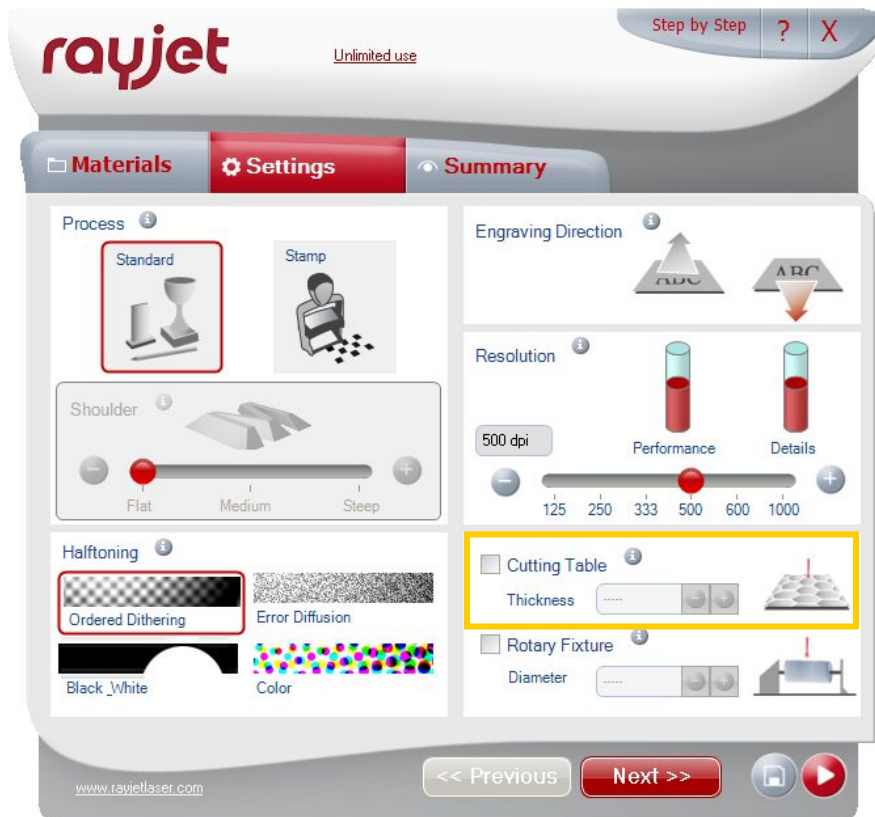
The right focus level is reached, when the focus tool is touching the engraving material. It is not necessary that the focus tool falls off.





For the first sign, leave the rest of the “Materials” tab as it is.

Click on **Next >>** to proceed with the “Settings” tab.



If you have a cutting table (honeycomb grid) please activate it here.

For the first sign, leave the rest of the “Settings” tab as it is.

Click on **Next >>** to proceed with the “Summary” tab.

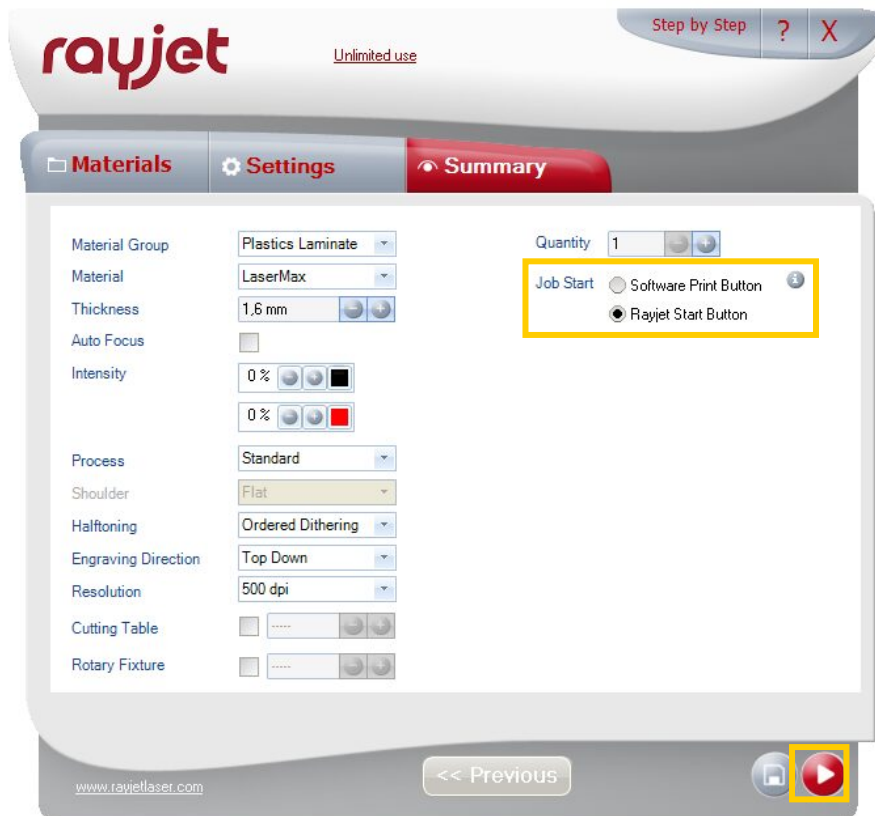






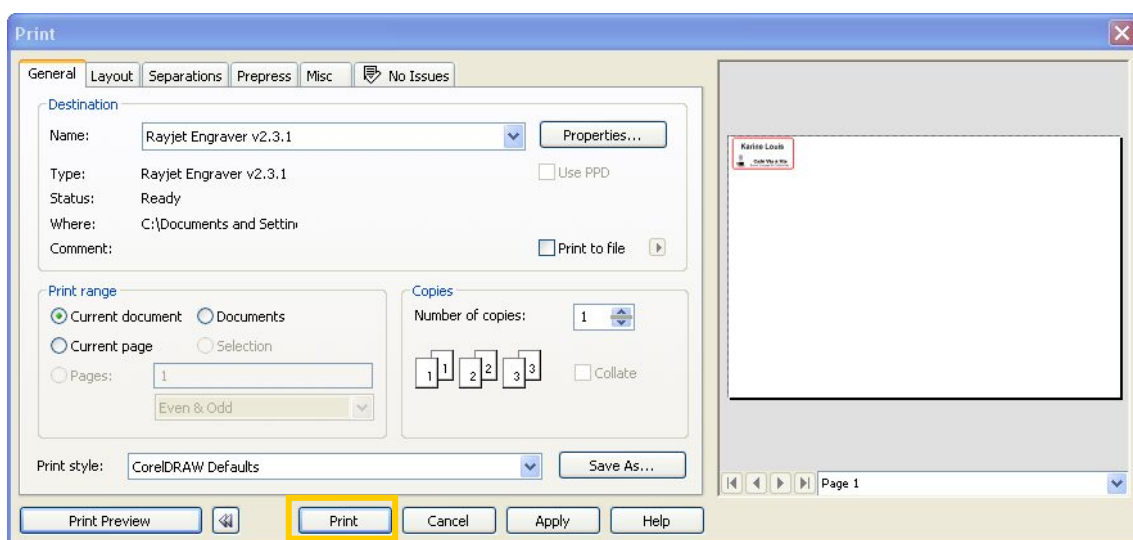
The summary tab gives an overview on the previously selected settings. During further use, you might prefer this screen instead of the “Materials” and “Settings” tabs.

For the first sign, select “Rayjet Start Button” as Job Start option and click on “Start”



The Rayjet Commander closes.

Click on “Print” to transfer your file to Rayjet.




If not done yet, place the material in the Rayjet, focus manually and close the top cover of the Rayjet. Press the “Start” Button on the Rayjet keypad to run your first sign.

## 2.5.2 Simple Stamp

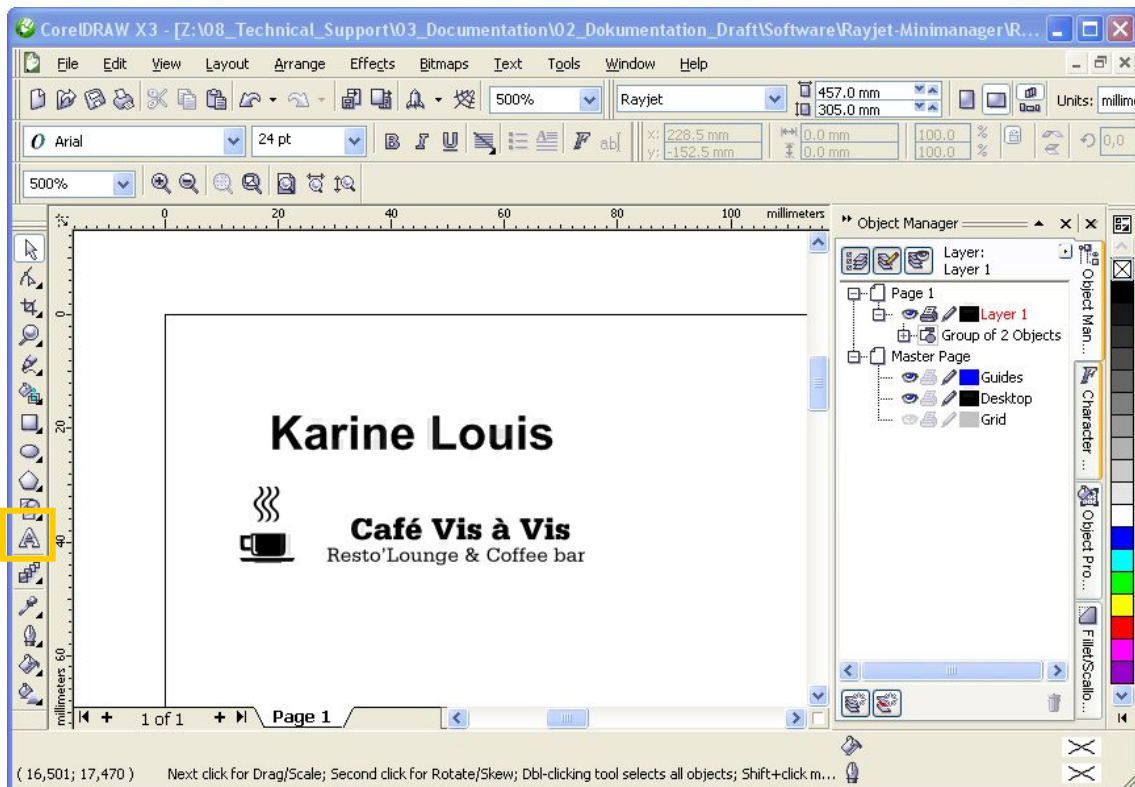
Open Corel Draw



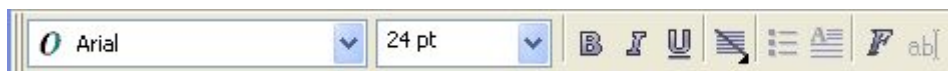
Generate your text and/or logo in black and white.

Click on the text symbol  in the Tool box, then click on the page area. A text field opens.

Type in Text and add additional text fields if necessary (check out the video on your Rayjet DVD for further details on each step).



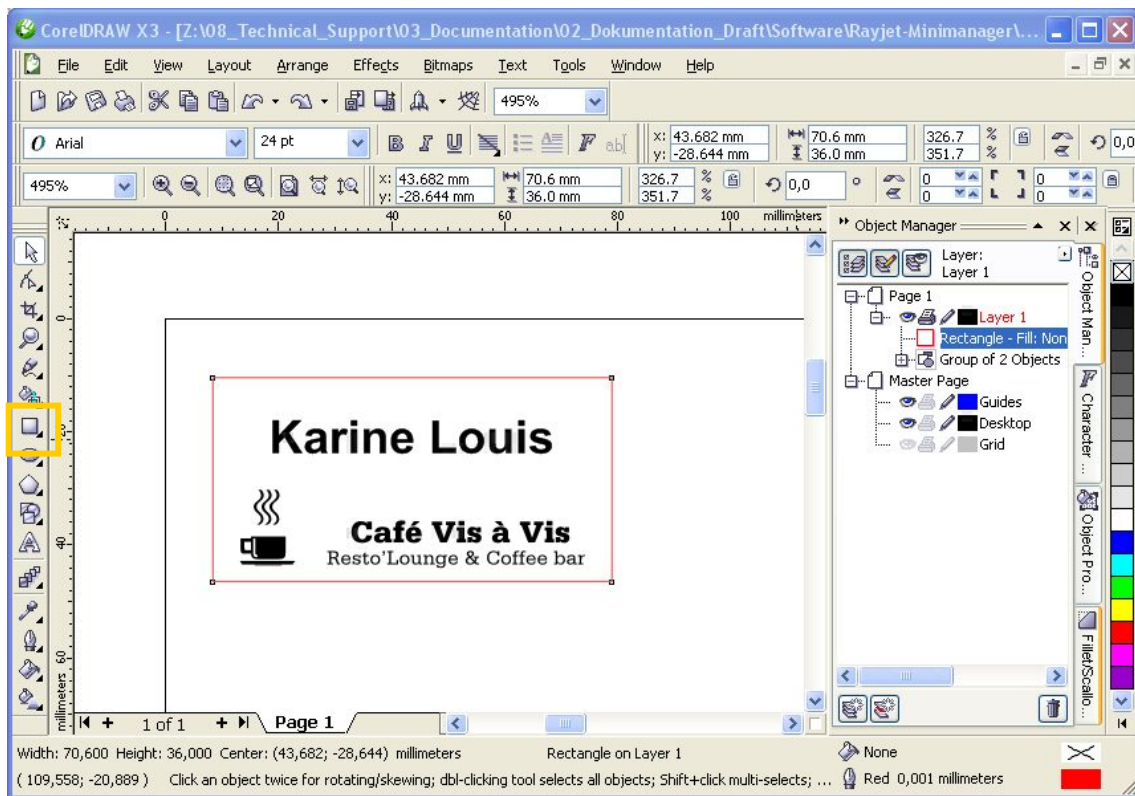
To edit texts, use the text editing toolbox. You can select different fonts, size, styles etc.



When your stamp is ready, add a cutline with color red (RGB 255/0/0) and line thickness 0.001mm. In the first step, select the rectangle tool in the tool box. Click and hold at the top left position, release the mouse button on the bottom right position.

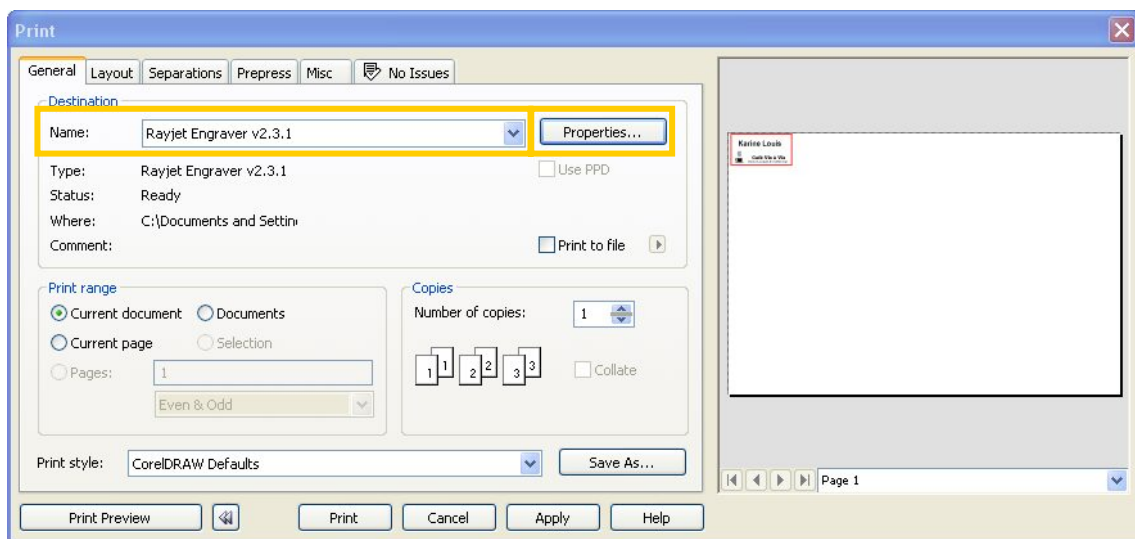


Without closed outline the stamp job won't be processed at all!



To send the object to the laser machine, open the menu "File" and click on "Print".

The Corel Print-Dialogue opens. Select "Rayjet Engraver ..." and click on "Properties".



The Rayjet Commander opens (for details check out section 3 “The Rayjet Commander Interface”)

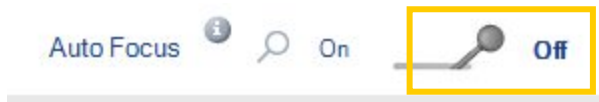
Click on the red arrow buttons to slide through the different material groups. Click on the sheet of “Rubber” and select the type of rubber you use.



The standard thickness of the material will show up – this value is very important if you want to use auto focus. Correct the value if necessary.



Turn the auto focus off for the first sign. For further use, read section “3.1.3 Auto Focus”.



To focus manually, turn Rayjet on and put the rubber sheet in the upper left corner. Place the focus tool above your material on the x-axis housing. Then move the table up by using the “up” key for the z-axis on the Rayjet keypad.

The right focus level is reached, when the focus tool is touching the engraving material. It is not necessary that the focus tool falls off.





## First Steps

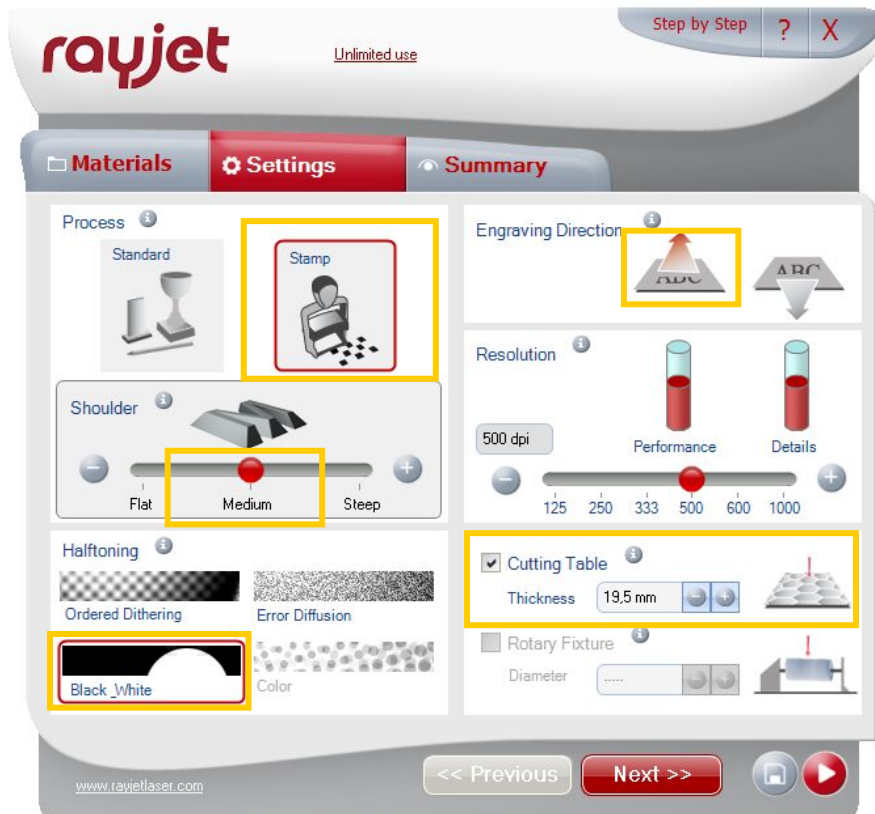
For the first stamp, leave the rest of the “Materials” tab as it is.

Click on **Next >>** to proceed with the “Settings” tab.

Activate the process “Stamp” and the shoulder setting “Medium”.

Activate “Black \_White”. This is important to prevent raster effects if the graphics is not solid black.

Select Engraving direction “from bottom to top” and the cutting table if applicable.




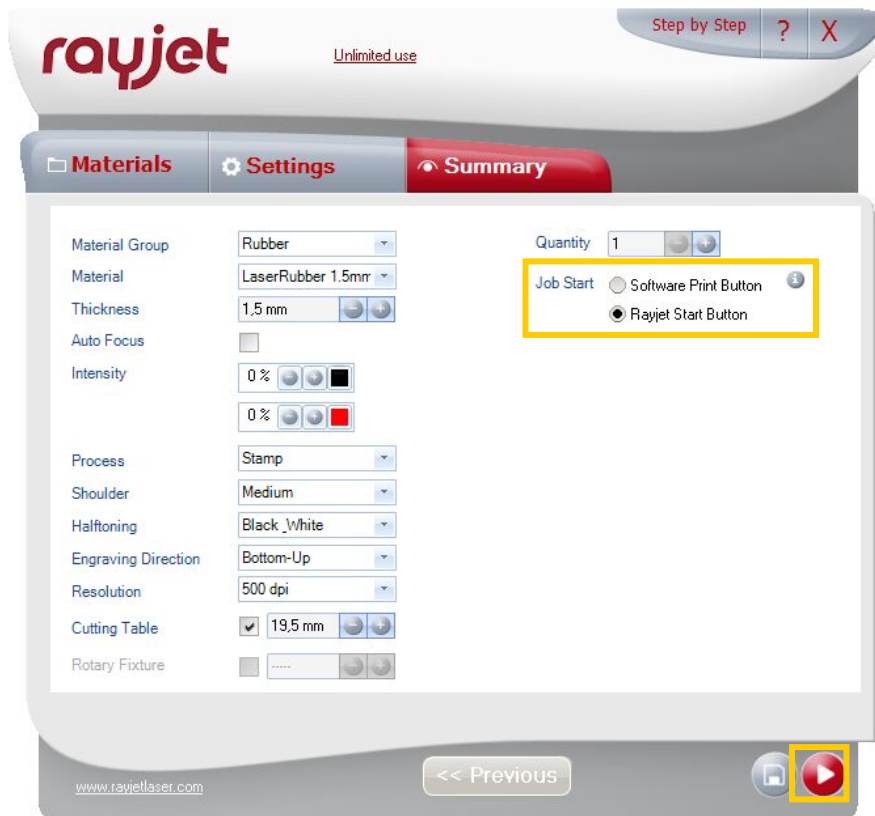
Click on **Next >>** to proceed with the “Summary” tab.





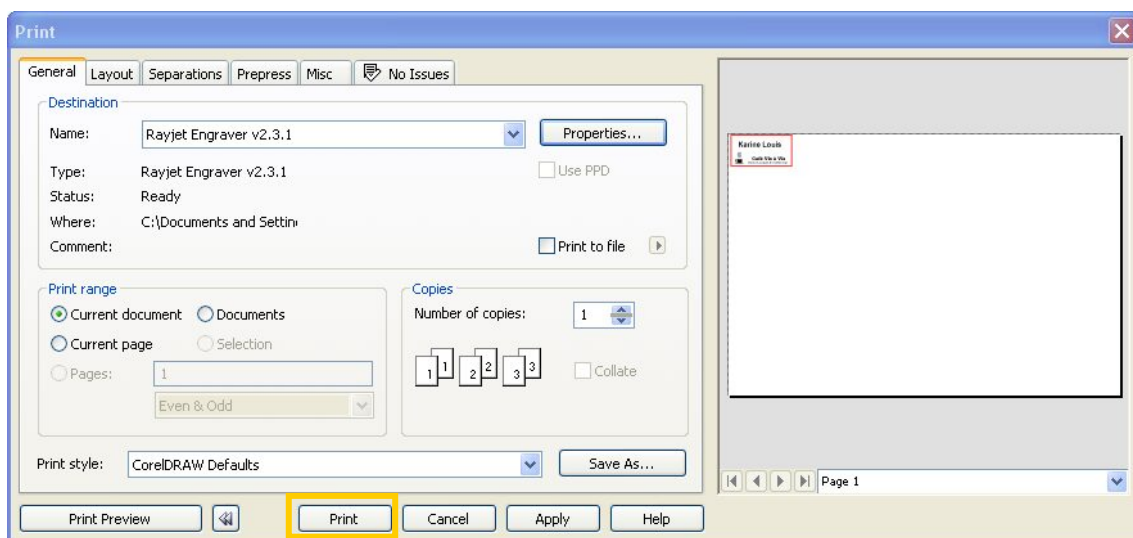
The summary tab gives an overview on the previously selected settings. During further use, you might prefer this screen instead of the “Materials” and “Settings” tabs.

For the first stamp, select “Rayjet Start Button” as Job Start option and click on “Start” 



The Rayjet Commander closes.

Click on “Print” to transfer your file to Rayjet.

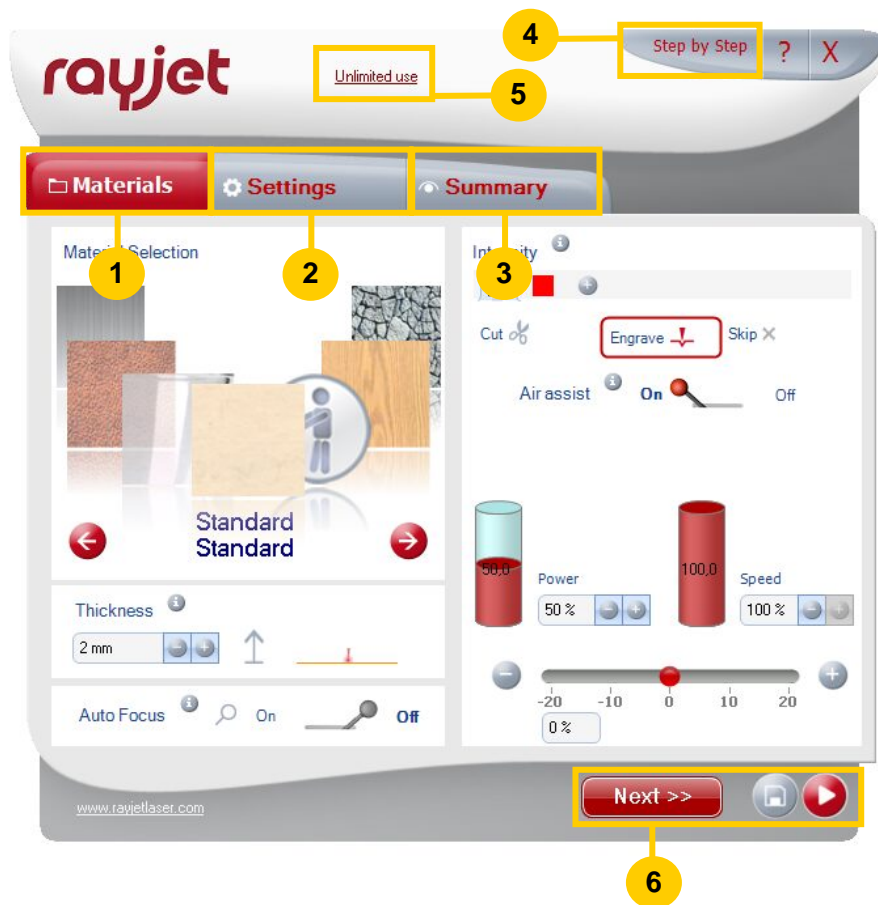


If not done yet, place the rubber plate in the Rayjet, focus manually and close the top cover of the Rayjet. Press the “Start” Button on the Rayjet keypad to run your first stamp.





### 3 The Rayjet Commander Interface



- 1 Materials Tab
- 2 Settings Tab
- 3 Summary Tab
- 4 Step by Step guide
- 5 Validation (Unlimited use)
- 6 Rayjet Commander Buttons





### 3.1 Materials Tab





- 1 Material Selection
- 2 Thickness
- 3 Auto Focus
- 4 Intensity





### 3.1.1 Material Selection

Scroll through the different material groups with the red arrow-buttons.  

Click on the picture of a material group and the list of materials will show up.



Double click on the material you want to use.

You can select predefined materials or create your own materials to meet your demands.

New materials can be created in the “My Materials” group, or in any of the existing material groups.


Click on the desired material group, and select “Add new material”.


New material in “My Materials”

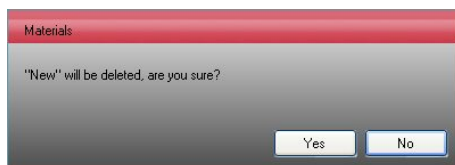


New material in any material group



Enter the name you want to use for your new material and click on  next to the name or confirm with ENTER to save the new material.

If you want to delete a material, use the  button next to the name. You will be asked for a confirmation.





### 3.1.2 Thickness

Measure the thickness of your material and enter it in this section. The value is saved for the currently selected material.



Especially when you use the “Auto Focus” it is absolutely necessary to enter the correct value here.

### 3.1.3 Auto Focus

This option will help you to automatize your process, especially together with the Job Start type “Software Print Button”. Compare section “3.3.3 Job Start”.

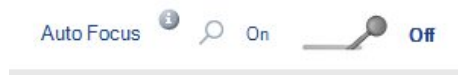


If you want to work with the Auto Focus option, all options influencing the focus position have to be set correctly. If this is not observed, the material might touch parts of the x-axis which may lead to severe damage.

The software needs the following information to determine the right focus position:

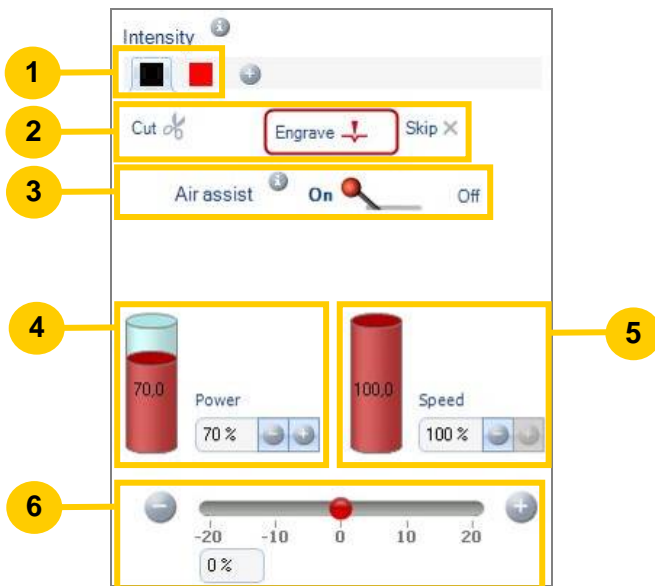
- Thickness of the material (compare section “3.1.2 Thickness”)
- Cutting table (activate if installed, compare section “3.2.6 Cutting Table”)
- Lens (select the right lens, as described in section “4.1.2 MiniManager Laser settings”)

Switch the auto focus off, when you focus manually with the focus tool as described on page 23.



### 3.1.4 Intensity

The most processing values are defined in this section.



- 1 Color tabs
- 2 Processing type
- 3 Air assist
- 4 Power
- 5 Speed
- 6 Intensity slider

#### 1. Color tabs

Switch between the colors to adjust the settings for each color in your graphics file (e.g. CorelDraw).

Click on to add more colors. Double-click on a color to delete it.

You can define up to eight colors.

The RGB values of the colors are listed in the following table. The colors in your graphic have to correspond to those RGB values.

No	Color	Red	Green	Blue
1	Black	0	0	0
2	Red	255	0	0
3	Blue	0	0	255
4	Desert Blue	51	102	153
5	Cyan	0	255	255
6	Green	0	255	0
7	Grass green	0	153	51
8	Forest green	0	102	51



## 2. Processing type

For each color you can define if it shall be cut or engraved. In some cases you might want to Skip a color as well.



“Cut” will only work on vector objects with line thickness 0.001mm (hairline) and the exact color according the color table above. Bitmaps do NOT work.

“Engrave” will work on bitmaps or vector objects with thick lines.

Standard setting is black for engraving and red for cutting.

“Skip” a color to deactivate it for the current job.

## 3. Air assist

For most materials the air assist is important to remove smoke and the engraved dust from the processed material.

## 4. Power

You can adjust the power from 0.1 % to 100%.

## 5. Speed

You can adjust the speed from 0.1 % to 100%. The maximum engraving speed is 1.5 m/sec or 60 inch/sec.

For cutting thick materials you will have to reduce the speed to settings below 1.

## 6. Intensity slider

“Intensity” describes the impact of the laser on your material. This impact is depending on

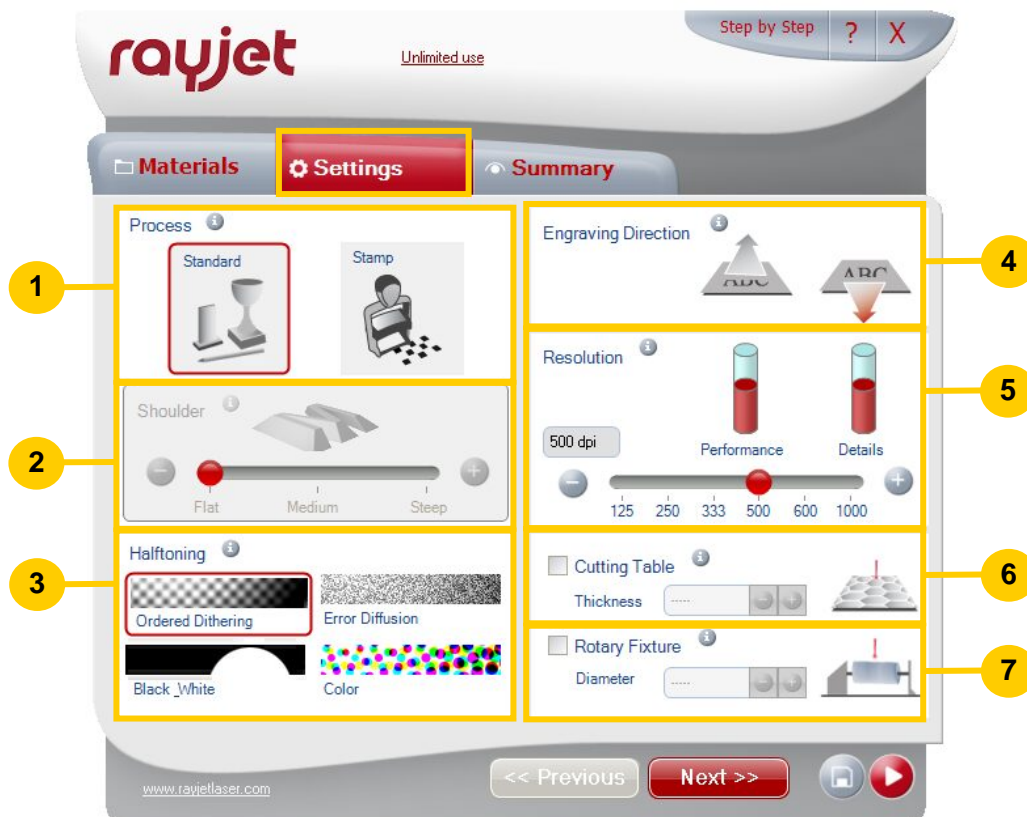
- the power the laser source is providing
- the duration the laser touches the material

When the power is increased, the impact is increased too. When the speed is increased, the duration and therefore the impact are decreased. It is important to know this to understand the behavior of you laser and material.

With the intensity slider you can easily adjust the intensity +/- 20% of the settings fixed with the “power” and “speed” values. While you move the slider, you can see, that the bars for power and speed will be adjusted to meet the needs of intensity.



## 3.2 Setting Tab



- 1 Process
- 2 Shoulder
- 3 Halftoning
- 4 Engraving direction
- 5 Resolution
- 6 Cutting Table
- 7 Rotary Fixture

### 3.2.1 Process

Select “Standard” to engrave and cut signs of any kind. White objects will be omitted, black or colored objects will be engraved.

Select “Stamp” to produce stamps. With this setting, the designed text, logo etc. will be automatically inverted and mirrored to produce the rubber stamp. White areas will be engraved. Take care to use only pure black/white graphics for stamps to prevent unwanted raster effects. This means, you have to adjust your graphics or use “Black\_White” (compare section “3.2.3 Halftoning”).



For stamp production it is necessary to create a cutline with color red RGB 255/0/0 and 0.001mm (hairline) around the stamp pattern. Otherwise the stamp pattern will be ignored from the software. This would result in an empty plate in MiniManager.



### 3.2.2 Shoulder

This setting is only valid for stamp-process and defines the shape of the edges of the letters and logos of the stamp.

### 3.2.3 Halftoning



Generally, color graphics and images are interpreted by the laser as black/white images. The darker the color in the original graphic, the thicker the placement of laser pulses on the material. This generates a half-toned engraving similar to a black and white photograph in a newspaper. This type of halftoning is “Ordered Dithering”.

“Error Diffusion” is also called "dithering" . Here, a graphic is altered pursuant to a tempered computer to harmonize the gradients in the end. The result is an image that is quite pleasing to the human eye.

“Black White” is used to suppress the halftoning. Dark areas will be engraved as full-black areas, bright areas will be interpreted as white and not engraved. This setting is important when processing stamps, as unwanted raster effects can destroy the stamp imprint.

“Color” engraving is used to suppress the conversion into a black/white picture. The laser processes the colors successively. Therefore this option will help you to:

- Process engraving/cutting in a defined order.
- Achieve different engraving depths resulting of settings for each color.
- Set up different parameters for cut line types.
- Engrave a picture with additional text (text in color, picture rasterized as usual).

**Important:**

The color definition (in RGB) in the graphic must correspond exactly to the values in the Rayjet Software.

No	Color	RGB Color Model		
		Red	Green	Blue
1	Black	0	0	0
2	Red	255	0	0
3	Blue	0	0	255
4	Desert Blue	51	102	153
5	Cyan	0	255	255
6	Green	0	255	0
7	Grass green	0	153	51
8	Forest green	0	102	51



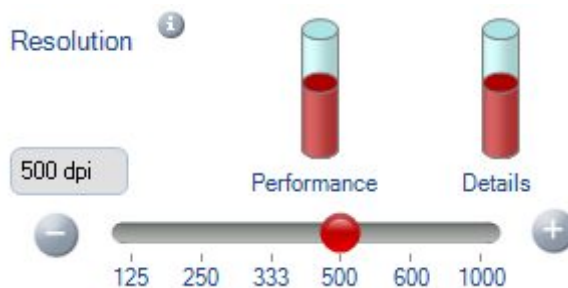
### 3.2.4 Engraving Direction



Your Rayjet can engrave either from top to bottom or from bottom to top. Engraving from top to bottom is the standard. During engraving, the removed material (dust) is suctioned over the backside of the machine. When this happens, the dust could remain trapped in the engraving's depressions but this can be easily wiped off.

On some materials the “bottom to top” engraving improves quality (e.g. sticky Laminates).

### 3.2.5 Resolution



The resolution is provided in dots per inch (dpi). This figure provides the number of engraved rows per inch (2.54 cm). The finer the details in the layout, the higher the recommended resolution (standard: 500 dpi).

When adjusting this value you have to keep in mind the ratio of details to performance. With a resolution of 250 dpi, 250 rows per inch (25.4 mm) are engraved. With a resolution of 1000 dpi, this value increases to 1000 rows. The higher the resolution, the longer the engraving time. An engraving time of 1 minute with 250 dpi means will mean approximately 4 minutes for 1000 dpi at same speed setting.

### 3.2.6 Cutting Table



Use of a cutting table is recommended for optimal cutting results. A reduced contact surface due to the honeycomb structure minimizes the beam reflection and thus produces better cutting results.

You must activate this option when using the Auto Focus feature with the cutting table installed (compare section “3.1.3 Auto Focus”), so that the processing table adjusts to the correct focusing height.

### 3.2.7 Rotary Fixture



With your Rayjet you can engrave round, cylindrical and spherical objects. When using a rotary fixture, the automatic motion will change from a Y-direction to a rotary motion. Consequently, the axis has to be moved in Y-direction manually.



Always switch the machine OFF before you plug or unplug the rotary! If this is not observed, the electronics might get severely damaged.

Details according the usage of the Rotary attachment can be found on the Rayjet DVD.

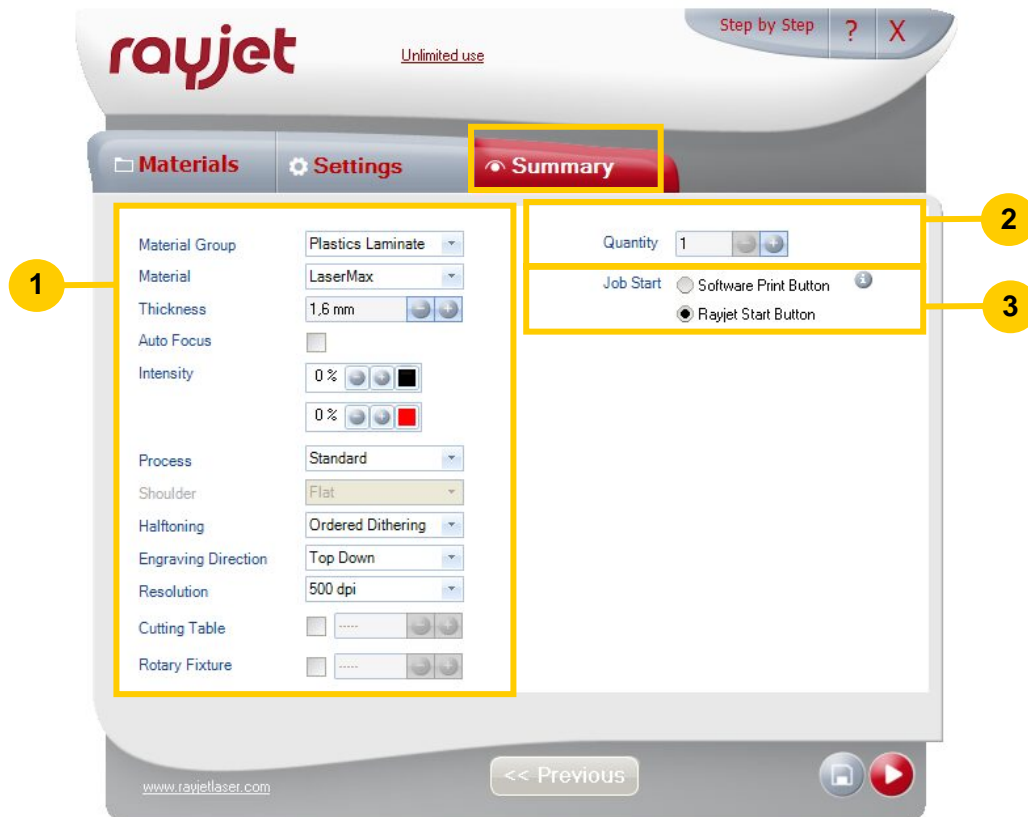
Here is a workflow description:

1. Switch the Rayjet off.
2. Plug and position the rotary fixture.
3. Close the top lid.
4. Switch Rayjet on and wait for the end of the reference move.
5. Measure and note the diameter of the object at the point where the marking should be.
6. Open the top lid.
7. Insert and fix the object in the rotary fixture.
8. Manually move the X-Axis in Y-direction towards you until the front edge of the x-axis is above the highest position of the object.
9. Focus manually onto the object.
10. Close the top lid.
11. Open the MiniManager and wait until it is connected with the laser
12. Click on "Move Home" in the software to move the laser head to X=0 (compare section "4.1.2 MiniManager Laser settings").
13. Move the laser head to X=420mm with "Move Position" in the software.
14. Open the top lid.
15. Manually move the X-Axis in Y-direction until the laser pointer is in the middle of the rotary (the marks on the right side).
16. Close the top lid.
17. Move the laser head to the desired position of the graphics with "move laser" or arrow keys in the software (compare section "4.1.2 MiniManager Laser settings").
18. Write down the exact position from MiniManager.
19. Open your graphic program (plate size has to be 457x305 mm).
20. Position the job in the graphic program at the position you wrote down before.
21. Go to print and choose the material settings and other properties.
22. Activate the rotary fixture and enter the diameter you measured before.
23. Check that autofocus is off.
24. Start the job.
25. After finishing the work with the rotary, switch the machine off.
26. After the machine is switched off, unplug and remove the rotary fixture.





### 3.3 Summary Tab



- 1 Overview
- 2 Quantity
- 3 Job Start

#### 3.3.1 Overview

This area gathers the settings selected in the both previous tabs (Materials Tab and Settings Tab). When your material settings, especially the power and speed settings are defined well and saved for each material, you may prefer to use only the summary tab to check and adjust your settings to save some time.

#### 3.3.2 Quantity

When you want to produce several equal jobs, enter the desired number here. Rayjet will keep the job in the memory and you can restart the job as many times as defined here.

#### 3.3.3 Job Start

Activate “Software Print Button” to start Rayjet immediately after “Print” was clicked in the software. This will help you to automatize your process. Also compare section “3.1.3 Auto Focus”.

Activate “Rayjet start button” to start the process manually on the Rayjet or in the MiniManager.

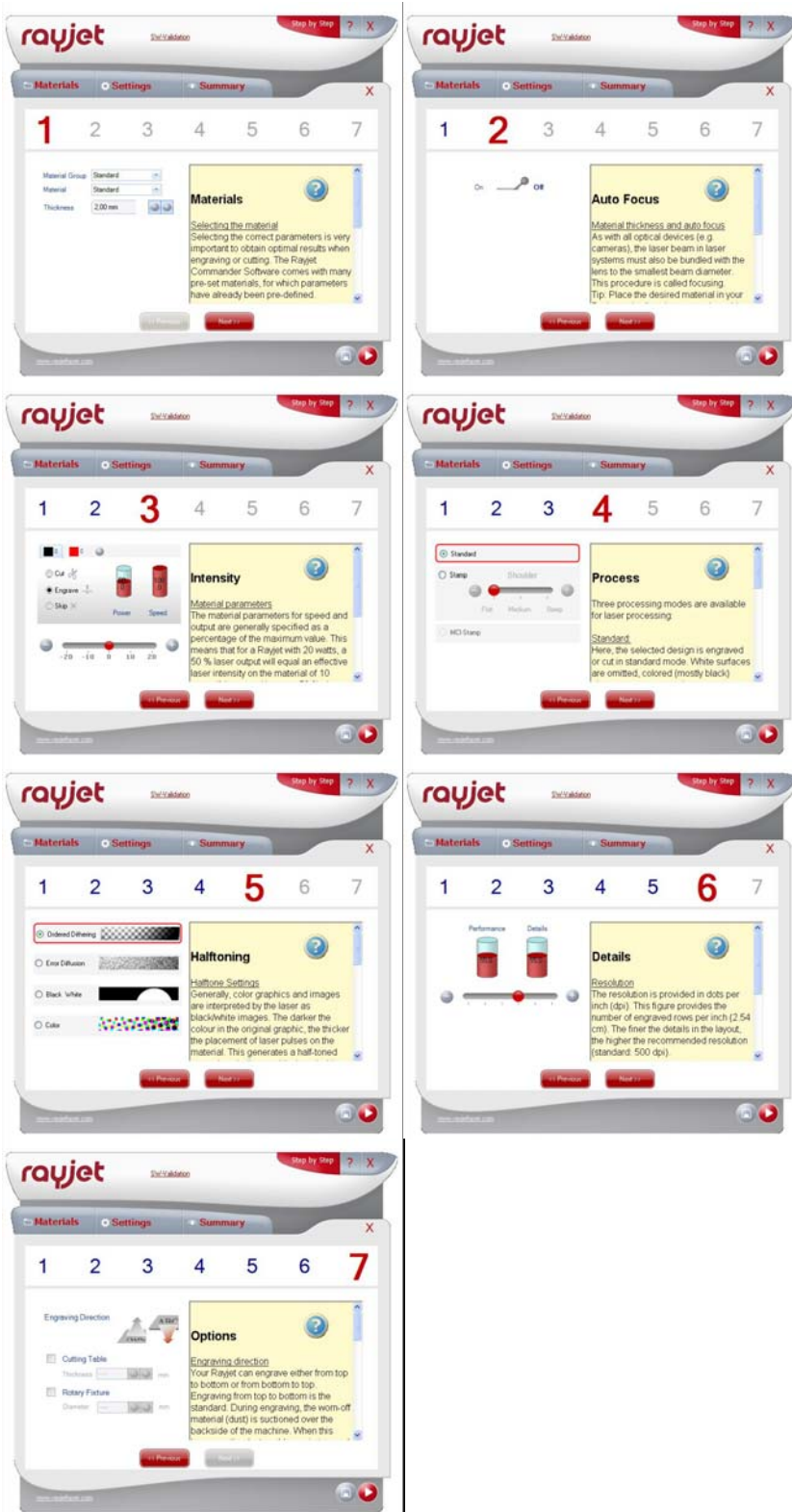




### 3.4 Step by Step guide

This guide will help you during the first few samples, or whenever you want to recall the basic information for each section.

All steps are described while you can do your settings. At the end you will be able to print the job.



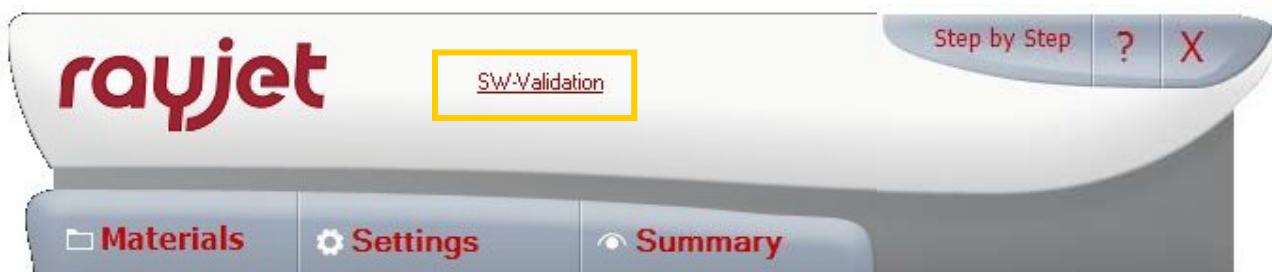
### 3.5 Validation (Unlimited use)

The following or similar messages can show up.

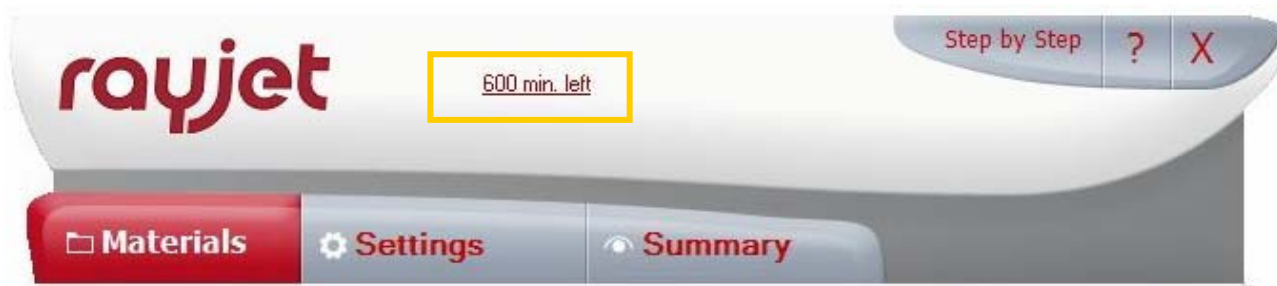
Unlimited use: the Rayjet is registered properly and will be usable for unlimited time.



SW-Validation: the use of the Rayjet is prohibited. You need to do the registration process to be able to work again.





X min left: the Rayjet is in starting mode or in pay per use mode. As soon as the time counter counts down to 0 min left, "SW-Validation" will show up and you are not able to work anymore.




Refer to the section "2.3 Software registration" for details on the registration procedure.

### 3.6 Rayjet Commander Buttons

Click on  to switch to the next tab (Materials, Settings, Summary)

Click on  to save the changed settings for future jobs even without starting the job.

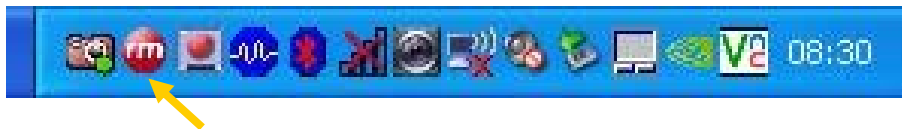
Click on  to send the job to the Rayjet.

## 4 The Rayjet Minimanager

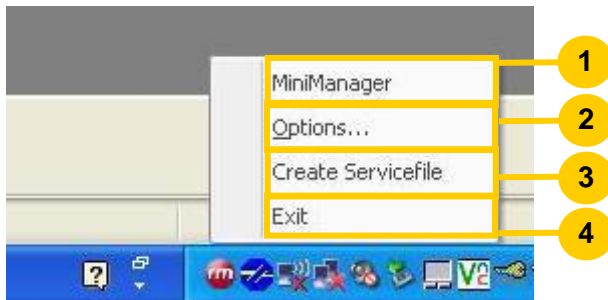
To get access to the Rayjet MiniManager double click on the “MiniManager” shortcut on your desktop.



The software opens in the background and the MiniManager icon  shows up in your task bar.



Right click on the MiniManager icon to get the following options in the context menu:

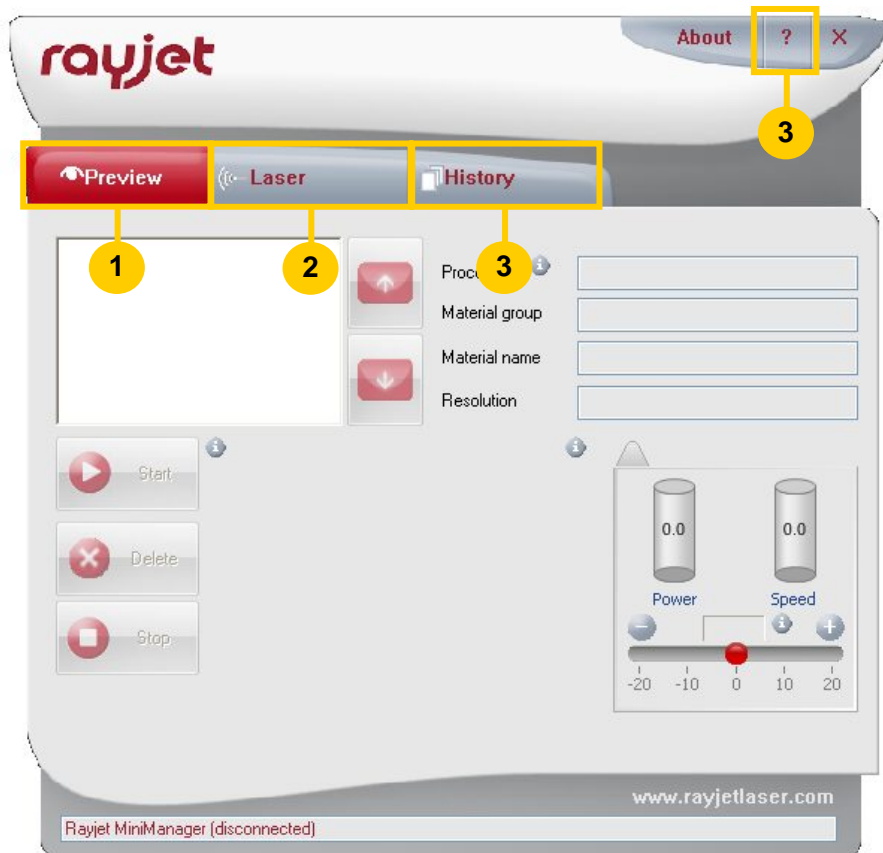


- 1 MiniManager Operating Window  
See below for details
- 2 MiniManager Options  
See below for details
- 3 Create a Servicefile  
See below for details
- 4 Exit the software  
Select this option to close the MiniManager completely.





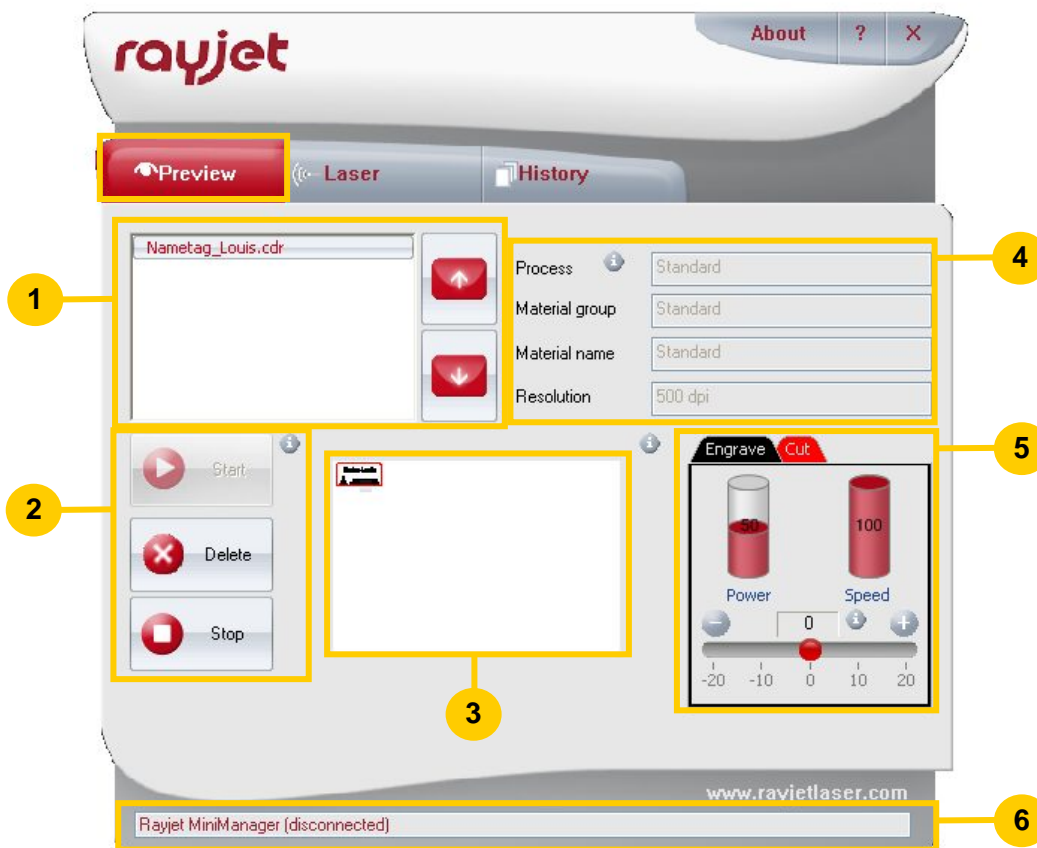
## 4.1 MiniManager Operating Window



- 1 Preview
- 2 Laser settings (position, lens)
- 3 History
- 4 Help - Laser Manual



### 4.1.1 MiniManager Preview



- 1 Job Queue
- 2 Control Panel
- 3 Preview area
- 4 Job description
- 5 Intensity slider
- 6 Status bar

#### 1. Job Queue

When you print the jobs one by one and send the jobs immediately to the Rayjet, maximum one job will be active all the time. Processed jobs will be deactivated and grayed out.

To reactivate a grayed out job, right click on it and click on “reset job”.

The number of jobs kept in the queue can be set to your demands in the options. For details compare section “4.2 MiniManager Options”.

#### 2. Control Panel

Buttons to start/pause, delete or stop the selected job.





### 3. Preview Area

The preview area shows a thumbnail of the selected job.

### 4. Job description

In this section Process (Standard/Stamp), Material group, Material and Resolution of the selected job are shown

### 5. Intensity slider

In this section the bars for power and speed are shown and the intensity can be fine adjusted with the intensity slider. This is to help you during fine adjustment of your settings for a job.

Click on the color tabs to check and adjust the settings of each color.

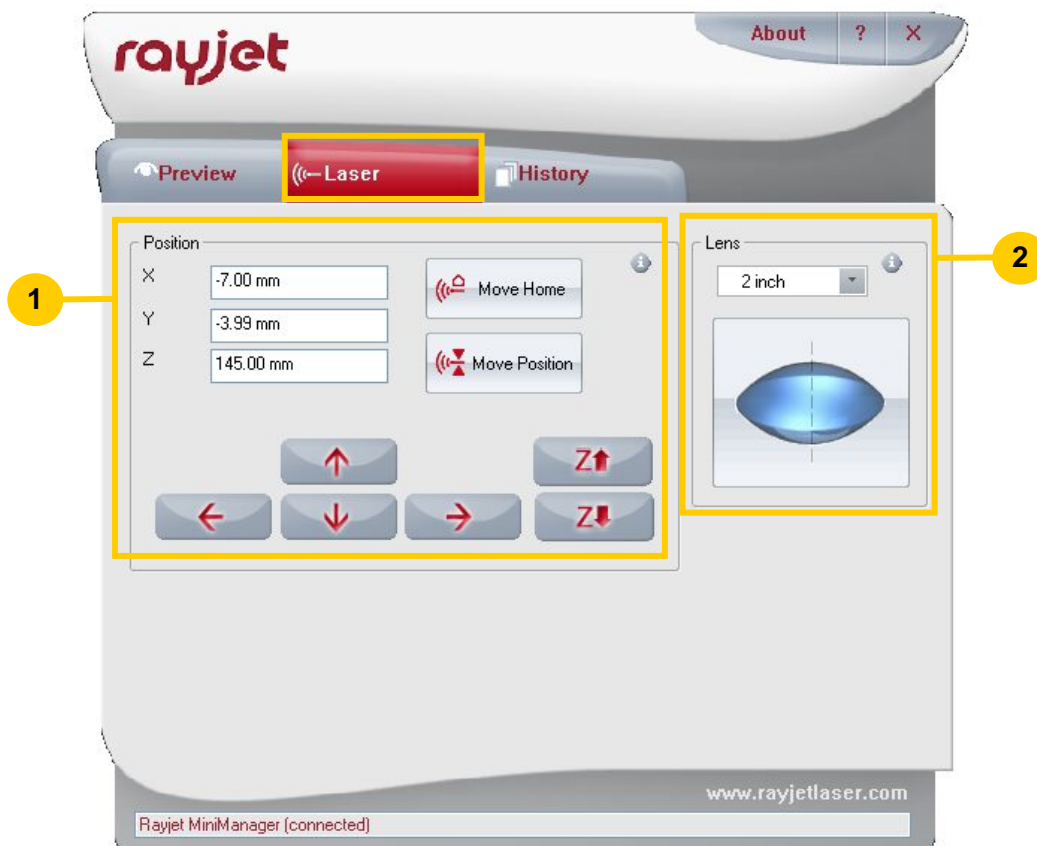
### 6. Status bar

Shows you the status of the Rayjet. Following stats are common:

Message	Explanation
Rayjet MiniManager (disconnected)	Rayjet is turned off or not connected via USB.
Rayjet MiniManager (connected)	Rayjet is turned on and ready to receive a job.
Rayjet MiniManager (processing "jobname", xx% done)	Rayjet is busy processing the mentioned job.



## 4.1.2 MiniManager Laser settings



- 1 Position
- 2 Lens

### 1. Laser Position

This section displays the current laser position and gives the possibility to move the laser.

“Move Home” drives the working head to the 0/0 position (cross point of the rulers).

Enter the desired position in the x and y fields and click on “Move Position” to start the movement.

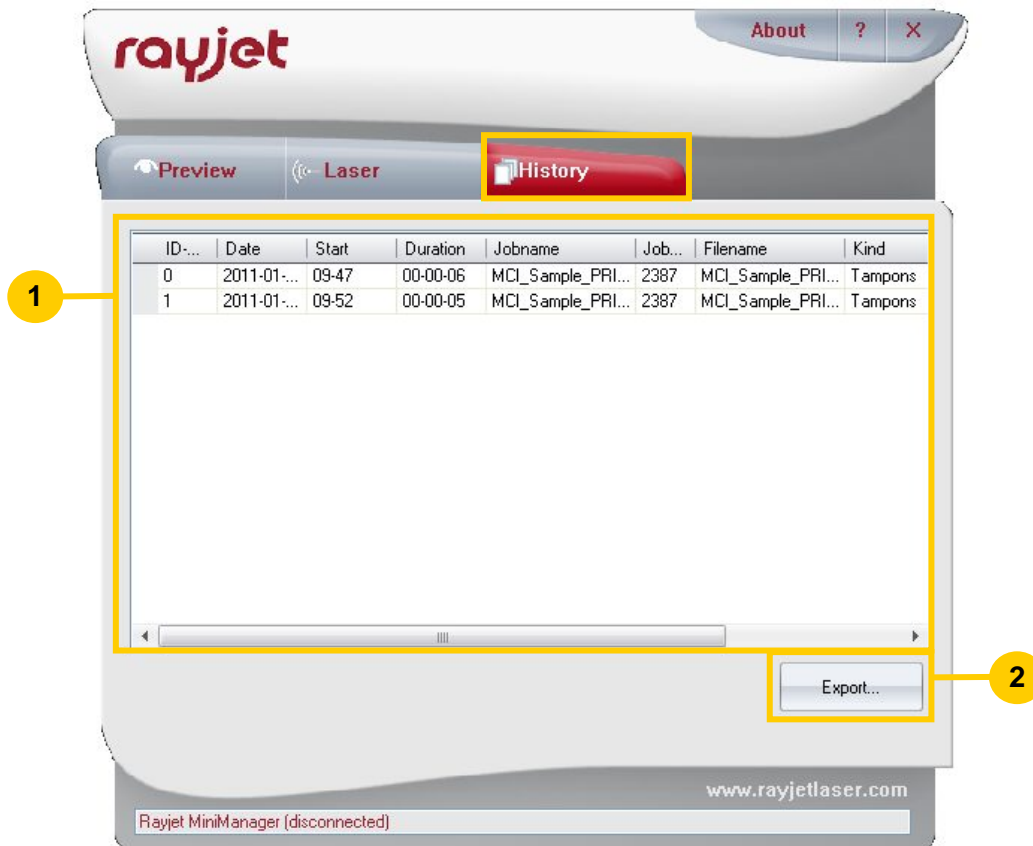
You can control the laser manually with the arrow keys in the software or on your computer keyboard (x: left / right, y: up/down, z: page up/page down)

### 2. Lens

Always select the lens which you are currently using in your Rayjet. This is especially important when using the Auto Focus option. The delivered standard lens is the 2” lens, but also 1.5” and 2.5” lenses are available.



### 4.1.3 MiniManager History



- 1 History list
- 2 History export

#### 1. History list

In this section you have an overview of the processed jobs. This might help you determine your productivity.

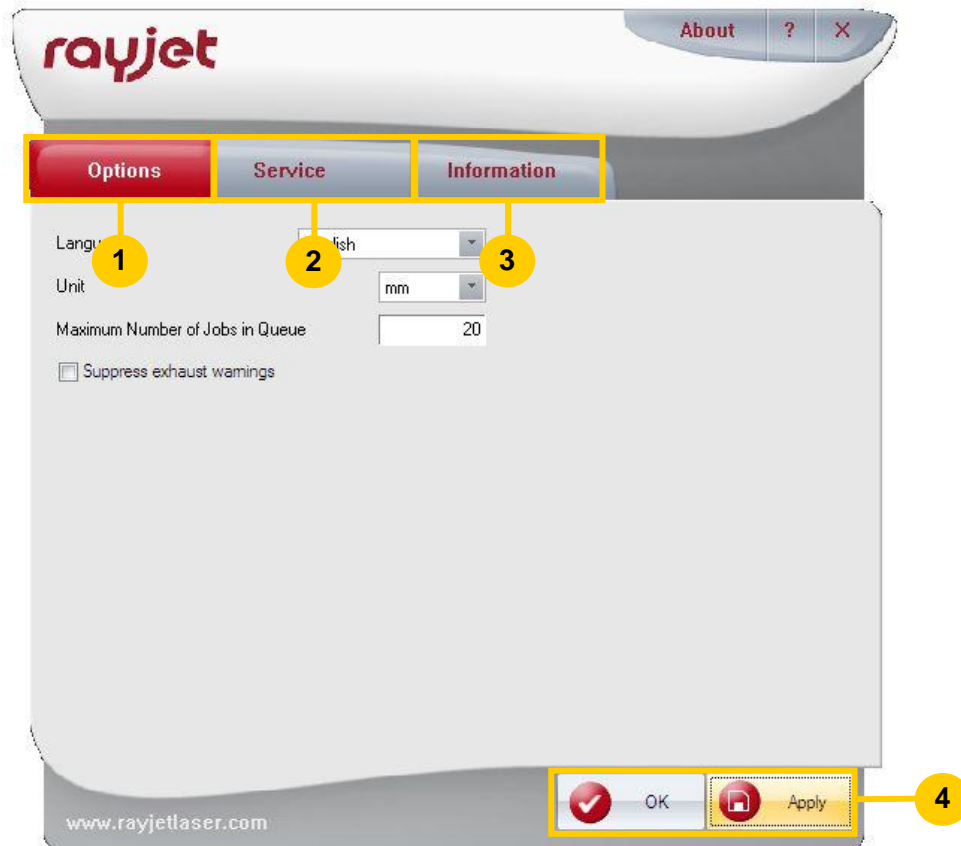
#### 2. History export

To have further possibilities of data processing, you can export the history as .txt file.

Do this regularly to keep the history clean.



## 4.2 MiniManager Options



- 1 Options
- 2 Service
- 3 Information
- 4 Control Buttons

Always click on “Apply” and “OK” when you change any settings.



## 4.2.1 Options



- 1 Language  
Select the language which you prefer to use.
- 2 Unit  
Select the unit which you prefer to use.
- 3 Maximum Number of Jobs in Queue  
Define how many jobs you want to keep in the job queue. Values between 1 and 25 are possible.
- 4 Suppress exhaust warnings  
Activate this option when you do not want to get warnings that the exhaust system is not started automatically.  
This might be suitable when you use an exhaust system not supplied by Trotec or when you do not connect the Trotec exhaust system with the connection cable.





## 4.2.2 Service



The service settings define machine parameters. Those parameters must only be adjusted by a service technician.





### 4.2.3 Information

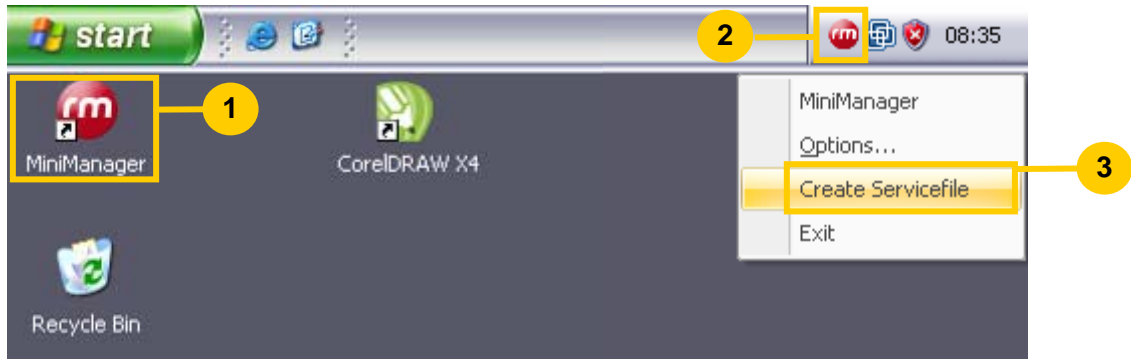


The “Information” screen shows machine information. Tell this information to your Service technician in any case of troubles.

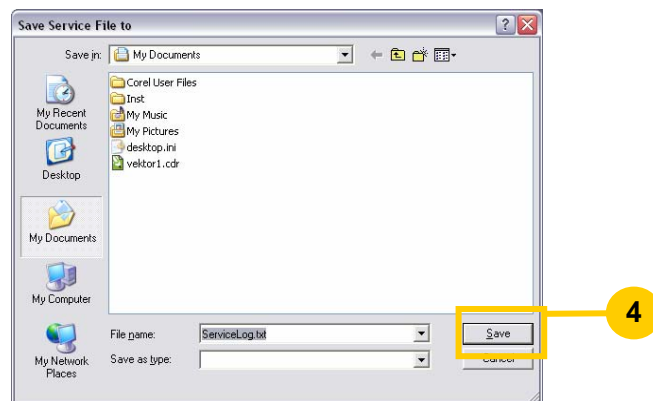


### 4.3 Create a Servicefile

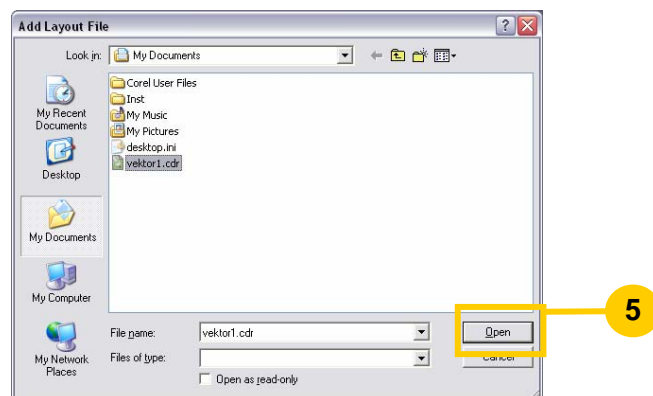
1. Open the MiniManager via double-click on the MiniManager icon on the desktop
2. Right-click on the MiniManager icon on the task bar



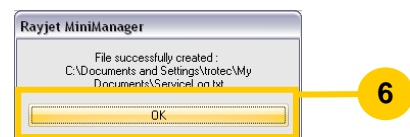
3. Click on „Create Servicefile“
4. Choose the directory to save the servicefile and click on „Save“



5. Chose the graphics file which makes troubles and click on „Open“



6. Click on OK and send the created service file to your technician.





## 5 Appendix

### 5.1 List of exemplary material settings

Material	Thickness [mm]	Power [%]	Speed [%]	dpi	Air	Process type	Lens
Veneer	0,5	70	100	500	ON	Engrave	2"
Veneer	0,5	36	3		ON	Cut	2"
Cork	3	40	100	1000	ON	Engrave	2"
Cork	3	60	2		ON	Cut	2"
Birch	0,8	70	100	500	ON	Engrave	2"
Birch	0,8	70	3		ON	Cut	2"
Beech	4	100	100	500	ON	Engrave	2"
Beech	4	100	1		ON	Cut	2"
Rubber Classico	2,3	50	7	500	ON	Engrave	2"
Rubber Classico	2,3	75	2		ON	Cut	2"
Rubber Olio	2,3	50	7	500	ON	Engrave	2"
Rubber Olio	2,3	90	20		ON	Cut	2"
Rubber Aero	2,3	55	7	500	ON	Engrave	2"
Rubber Aero	2,3	75	2		ON	Cut	2"
Rubber Eco	2,3	50	7	500	ON	Engrave	2"
Rubber Eco	2,3	75	2		ON	Cut	2"
Rubber Speed	2,3	55	10	500	ON	Engrave	2"
Rubber Speed	2,3	70	2		ON	Cut	2"
Texture	1,6	100	65	1000	ON	Engrave	2"
Texture	1,6	30	1		ON	Cut	2"
Lasermax	1,6	70	100	1000	ON	Engrave	2"
Lasermax	1,6	35	1		ON	Cut	2"
Lasermark	1,3	70	100	1000	ON	Engrave	2"
Lasermark	1,3	35	1		ON	Cut	2"
LaserMarkReverse	1,3	100	90	1000	ON	Engrave	2"
LaserMarkReverse	1,3	35	1		ON	Cut	2"
Laser lights	0,13	25	60	1000	ON	Engrave	2"
Laser lights	0,13	15	3		ON	Cut	2"
Flex Brass	0,6	60	100	1000	ON	Engrave	2"
Flex Brass	0,6	25	2		ON	Cut	2"
Flex Color	0,5	50	100	1000	ON	Engrave	2"
Flex Color	0,5	25	2		ON	Cut	2"
Leather Cognac	2	40	40	500	ON	Engrave	2"
Leather Cognac	2	50	1		ON	Cut	2"





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