

TROTEC SPEEDY 400

Laser Cutting Preparation and Laser Checklist

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Prior to the start of any Laser Cutting Session, a file has to be ready/ prepared for use in a readable file format. Booking any one session starts at \$20.00 an hour and can be very costly when you show up unprepared.

At this point the Technician/Operator is not obligated to do file preparation for you unless assigned.

File Type:

Any vector or raster based files. Vector file are preferred because it allows you select multiple layers and swatches through the RGB colour pattern. This file can then be read by the *Job Control* Software to control/operate the laser into separate functions by defining the layer action such as cut, etch, and different engrave settings.

Exporting Checklist (adobe illustrator)

1. Files should be transferred using a USB memory stick
2. Document can be in any units
3. All vector strokes should be set to 0.072pts
4. Colour mode set to RGB only.
5. Remove all ruler guides.
6. Engraving requires closed vectors or fills.
7. Colour separation for different operations should be done with layers and RGB colours within Job control.

Rules:

The lift up cover of the laser has a screen that acts as a protective shield preventing the monochromatic light from damaging

your eyes - always insure the cover is fully closed.

Never leave machine unattended.

The lid needs to be shut during a cut/ engrave unless the pass through key is engaged.

Vent should always be on.

Running:

When starting, the laser head will always home the tool once the machine is turned on. Then place the material onto the bed to be cut and focus the laser head to the surface of the material to be cut.

Use a USB flash drive to run your file, nothing will be saved to the desktop.

Always focus the lens to the work surface to be cut.

Engraving Settings:

Power - 0.01-100%

Speed - 0.01-100 (See swatches for reference)

Cut Settings:

Power - 0.01-100%

Speed - 0.01-100 (most cut between 5-20, but paper can cut up to 100)

Approved Materials:

Plastics:

ABS , Acrylic, Delrin, Kapton tape, Mylar(polyester), PetG, Styrene, Two toned acrylic.

Nylon (melts badly)

Polypropylene PP (melts)

Foam:

Depron foam, Gator foam, EVA foam

Other:

Cloths (leather, suede, felt, hemp, cotton)

Magnetic sheets, glass (engrave only),

Papers, Rubbers (cannot contain chlorine)

Teflon (PTFE)

Woods (MDF< balsa, birch, poplar, red oak, cherry, holly, etc.)

We do not or cannot cut the following materials:

Metal, Polycarbonate (PC, Lexan) Any material containing chlorine such as PVC, Vinyl, Fiberglass, Printed circuit board, carbon fiber.