



## HOW TO OPERATE THE UNIVERSAL LASER SYSTEM (ULS) LASER CUTTER



### Machine Operation

1

**Go to ULS Software.**



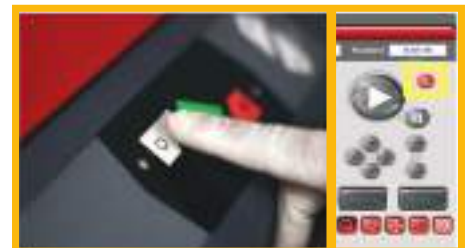
2

**Plug in the exhaust fan machine to eliminate the smoke and small dirt by the machine during operation.**



3

**Turn on the ULS machine via "Power" button of the machine or via the ULS softwarez**



## Machine Operation

4

**Open** the upper glass door of the machine to set the material.



5

**Open** the machine door.

**NOTE:**

This step is only applicable if there is no honeycomb.

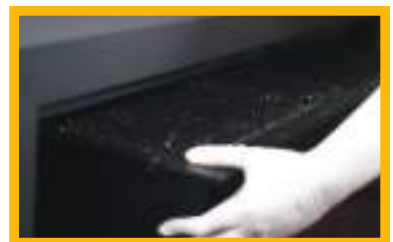


6

**Place** the honey comb.

**NOTE:**

This step is only applicable if there's no honeycomb.



## Machine Operation

7

**Close** the machine door.

**NOTE:**

This step is only applicable if there is no honeycomb.



8

**Place** the selected material on the honeycomb.

**NOTE:**

Can cut up to 4.5mm thickness Maximum working space: width x length: 40cm x 80cm.



9

**Move** the laser head to the material using the ULS software's buttons.

**NOTE:**

You can use "Home xy" button and "Focus view".



## Machine Operation

10

**Use** the Z axis tool to determine the distance between the laser head and the selected materials. Place the tool above the material.

**NOTE:**

Make sure that the "Z axis" tool has touched the laser head. If not, move the machine bed using the "Up and Down" machine buttons or using the "Home z button" of the ULS software.



11

**Remove** the "Z axis" tool after using.

**NOTE:**

Place the tool to its original placement.



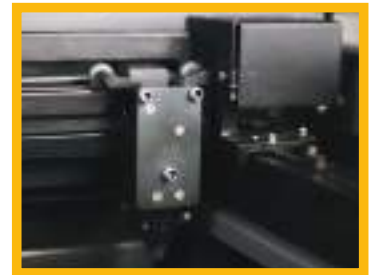
## Machine Operation

12

**Return** the laser head into its original placement on the upper right corner of the machine.

**NOTE:**

Use the Software "Home xy" button and "Focus operating from the ULS software upon operating the machine.



13

**Close** the upper glass door of the machine.



## Setting Up

1

**Click "Settings"** to set up any adjustment before laser process.

**NOTE:**

Use color red, blue, and black only in design making.

- Black - use black color in cutting a material or a certain part of it.
- Red - use red color for engraved design.
- Blue - use blue for outline design.



2

**Click "Material Database"** and choose what type of specific material you used.



## Setting Up

3

**Fill in** the material's size information based on the exact thickness of the selected material. This will help to control the machine processes power and speed settings.



4

**Click** “Apply”.



## Setting Up

5

Click “Manual Control” to adjust the speed, power, and PPI.

**NOTE:**

- **Speed** – how fast the laser head move during laser process.
- **Power** – the intensity of the laser head exerts during laser process.
- **PPI** (Point Per Inch) – number of laser pulses per inch used during laser process.



6

Click “Apply”.





## Setting Up

7

**Click the "Focus View" button to align the laser head in the material.**

**NOTE:**

You can also use the "Home xy" and "Relocate View" buttons to adjust the placement of the design in the Universal Laser System software.



8

**Click the "Start" button to start the laser.**



## FAQ/s

### What kind of material I can use in Universal Laser System?

**Ceramic** (Glazed tile, Laser tile, Saltillo Tile)

**Composite** (FR4/G10)

**Converter Materials** (3M™ Materials, Rogers™ Materials)

**Fabric** (Ballistic Nylon, B-Flex, Chemica, Denim, Felt, Film with hey activated backing, Siser, STAHL'S, Tackle twill)

**Foam** (Form core. Tool foam)

**Glass** (Lead crystal, Soda lime glass)

**Metal** (Aluminum, Metal marking compound, Painted metal, Powder coated metal, Steel)

**Natural** (Cork board. Leather, Mat board. Mother of pearl, Paper, Stone, Taskboard basswood lone, Taskboard white, Vellum, Wood)

**Plastic** (ABS, Acrylic, American Polyfilm, Arkema, Chemours, Covestro, DuPont, Evonik, Grafix. Henkel Iocite, Kapton film. Microsurface plastic, Mitsubishi, Mitsubishi chemical advanced materials, Nylon, PEEK, Polycarbonate, Polyster. Polypropylene, Polystyrene, POM (Derlin), Rowmark Technistro, Teijin. Victrex. Youngbo chemical.

### What are the sizes limitation of a selected material?

Can cut up to 4.5 mm thickness Maximum Working Space: Width x Length: 40 cm x 80 cm

## FAQ/s

### What software do I need to install aside from adobe illustrator?

Download the Universal Laser System software.

### How to download the Universal Laser System software?

1. Go to google application.
2. Type “**Universal Laser System software**” in the search box then click enter.
3. Click the first platform “**Software Downloads for ULS flatforms**”
4. In the “**Software Download**”, click “**Download Drivers for VLS, PLS, ILS flatforms**”.
5. In the given options, select “**UCP Installer**”.
6. Click “**Download UCP Installer**”.
7. Click the “**Download**” symbol on the upper right corner of your computer to save the file.
8. Click the “**Download**” symbol again to open the download folder.
9. In the folder’s download options, double click the “**ucpinst-5.38.57.95(2).exe**” to open the software application.
10. Once you open the software application, read the “**End User License Agreement**”.
11. Click the “**I AGREE**” button to continue the whole installation process of the software application.
12. “**RESTART**” your computer.
13. After a few minutes you’ll be able to see the icon and use the Universal Laser System software application.