

MUSE Hobby Laser Cutter

Model: MUSE Hobby Laser with Riser

Safety Instructions

- Always inspect the laser cutter for damage or breakage before each use. Do not operate machinery that is damaged or defective in any way.
- Always be aware that the laser tube is made of glass and is therefore extremely fragile and can cause severe lacerations if broken.
- Never modify, disassemble, or in any way alter the construction of the laser and never start up a system that has been modified or disassembled.
- Never leave the laser system unattended during operation.
- Keep the laser system clean and free of debris by cleaning the unit after each use. Remove the cutting grid to clean any small pieces that have gotten stuck or fallen through.
- Do not disassemble the machine or remove any of its protective covers.
- Never place hands or fingers into moving parts such as cooling fans.
- Never operate the machine with any of the panels removed, including the bottom panel of the riser attachment.
- Remember that the CO₂ laser beam is invisible! Keep hands away and eyes shielded.
- Never engrave or cut any material containing PVC or vinyl. Use only material supplied by the Pitsco Idea Shop. Seek assistance from the Pitsco Idea Shop staff.
- Never engrave or cut any unknown material.
- Always use the air assist, especially while vector cutting. Vector cutting movements are relatively slow and apply an extremely large amount of heat to the workplace. This buildup of heat can create a significant fire risk.
- Never run laser with lid open. Always be sure the lid is closed and never tamper with lid safety mechanism.
- Never operate the machine without a properly operating ventilation system.
- Never operate the machine without turning on the circulating water pump.
- Never look into the beam of the alignment laser (visible red diode laser).
- In case of fire, use fire extinguishers supplied by the Pitsco Idea Shop to extinguish the fire.
- Be aware that stacking materials (especially organic materials such as paper) can lead to increased risk of flame propagation or work piece ignition.
- Always keep the area around the machine clean and free of clutter, combustible materials, explosives, or volatile solvents such as acetone, alcohol, or gasoline.
- Before processing materials the user must verify whether harmful materials can be generated and whether the filter equipment of the exhaust system is suitable for the harmful materials. We emphasize that it is the responsibility of the user to consider the national and regional threshold values for dust, fogs and gases when selecting the filters and the exhaust system. Seek assistance from Pitsco Idea Shop staff.

- Do not open any of the machine's access panels while the unit is plugged in. Opening a panel may expose the operator to the unit's ac input power. The ac input power is potentially lethal and is located on the far right within the cabinet.
- Never make or break any electrical connections to the system while the unit is turned on.
- Any problems with the unit should be reported immediately to the Pitsco Idea Shop staff. Do not attempt to repair the unit on your own.
- In case of a blown fuse always contact technical support before replacing any fuses.
- Never access the electronics area with hands or tools unless the unit is disconnected from power for at least one hour.

Use Instructions

- Be sure the water circulation pump and air assist compressor are turned on before operating the laser.
- Use a direct connection from a computer (via Wifi, LAN ethernet or a direct link from your computer via an ethernet cable).
- Machining jobs can be accessed from a USB drive directly inserted into the USB port of the unit. Job settings cannot be changed from the laser control panel in this mode.
- Loss of power to the unit will cause any stored job files to be lost. If a USB drive is connected to the unit, files on the USB will remain even with a loss of power to the unit.
- This unit incorporates a fail-safe lid that keeps the laser from firing if the lid is not shut. If the unit does not seem to want to fire, check the lid to be sure it is completely closed. Connect with Pitsco Idea Shop staff for further assistance.
- If you feel that the unit needs to be re-aligned, contact Pitsco Idea Shop staff for assistance.
- Many functions of this unit can be controlled via the Touch Screen Interface. However, some software functions can only be accessed through software on a connected computer.
- Detailed use information for laser operations, software use and connectivity may be found in the [MUSE Laser Cutter User Guide](#)
- Connect with Pitsco Idea Shop staff for additional assistance.

Project Workflow



1. Create Design:

Create your design in the program of your choice. **Note:** Files should be created with laser cutting considered.



2. Connect to Software:

Link your Muse to the software by typing the IP address found on the Touch Screen (Settings>Network>Copy IP) into your browser (Google Chrome Suggested).



3. Import Design:

Using direct print from your design program, or by drag-n-dropping the file into the RetinaEngrave 3.0 workspace, import your design to the software.



4. Place Material:

Place your material into the laser bed workspace.



5. Focus:

Using the included focus billet, focus the laser to the material (consult your user manual). Note that if your Muse has the autofocus feature, focusing is automatic when the job is run.



6. Align Laser to Material:

Using either the perimeter tool, or camera function (see camera features), align your design on the appropriate area of your material.



7. Adjust Object Properties:

Using the Properties Manager Window, adjust your Vector or Raster settings for your cut, mark or engraving.



8. Run Job:

Double check your safety precautions and accessories, and press the "play" button to start the job.

Touch Screen Interface

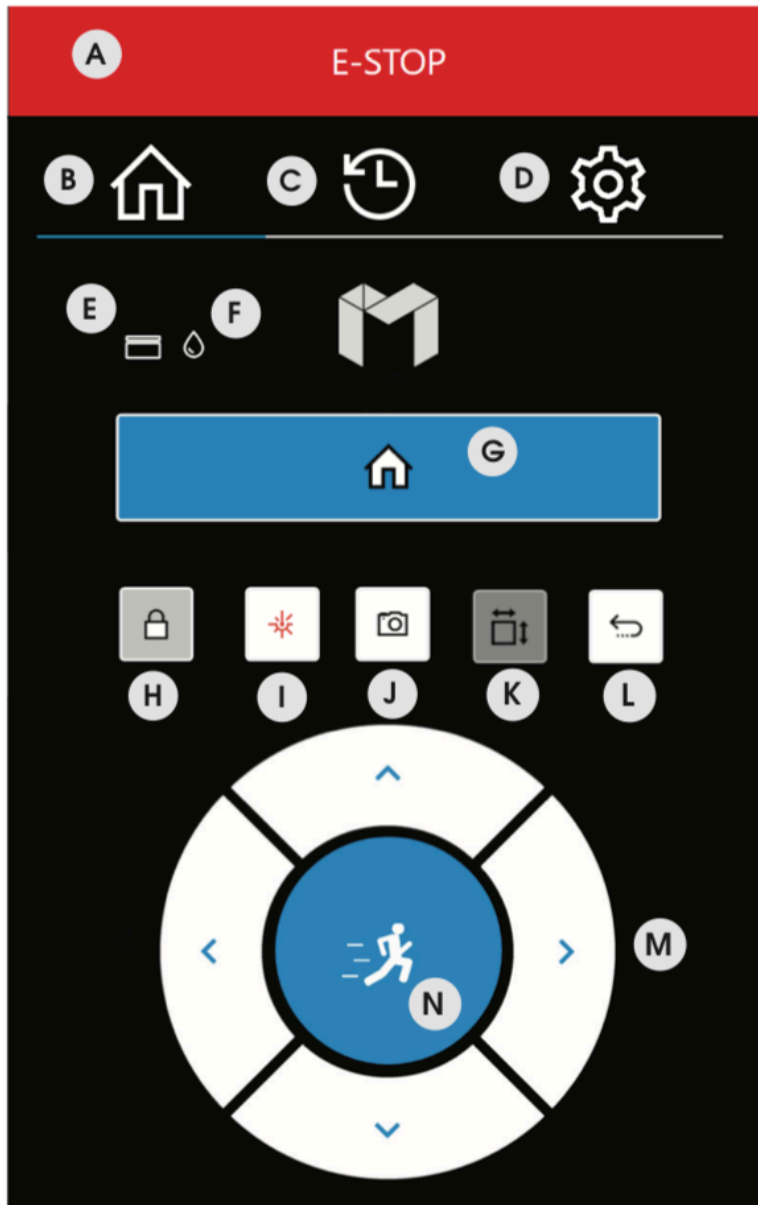


Figure 5.1

- A E-STOP**
Instantly stop any action.
- B HOME MENU**
Returns to the main Home Screen from any sub-screen
- C JOB HISTORY**
Accesses Job History sub-screen.
- D SETTINGS**
Accesses the Settings sub-screens.
- E LID OPEN / CLOSE**
Indicates lid is opened or closed.
- F WATER INDICATOR**
Indicates water system is running properly.
- G HOME LASER**
Instantly homes the laser
- H LOCKED/UNLOCKED**
Lock or unlock the gantry for auto or manual homing
- I TEST FIRE**
Test fire the laser. Used for mirror alignments and testing.
- J CAMERA**
Instructs camera to image workbed
- K JOG PERIMETER**
Laser automatically JOGs the extent of the current project.
- L RETURN TO POSITION**
Return gantry to a custom assigned position
- M JOG CONTROLS**
Jog gantry via control buttons or manually.
- N JOG SPEED**
Switch from slow jog to fast jog

