

Colaser Keypad Guide



Reset the laser, as if it was just powered on. The head will move to the upper right corner, where the limit switches are, and then back out to the preset user origin.



Fire the laser manually. This is a very brief pulse at relatively low power. This is useful for checking focus: the burned dot should be tiny and round. It's also useful for verifying the exact position of the laser head, more accurately than the visible red dot can guarantee.



This key is disabled.

Our laser doesn't have any autofocus sensors.



This is similar to the rectangular Frame button in LightBurn, but it works on the currently loaded job in the laser controller.



Set the User Origin to the current location of the laser head. The User Origin is used by the "Go to Origin" button in LightBurn, and also as the job origin when the Start From setting in LightBurn is set to User Origin. This button takes effect immediately and does not ask for or provide confirmation.



This button changes the meaning of the next button pressed, for certain buttons.



Stop the current operation, or exit the current menu on the LCD without taking effect. If you want the new settings to take effect, use the Enter key instead.



Start (if not running) or Pause (if running) the current job. A paused job can be restarted from where it was stopped. Depending on what operation was happening at the time the job was paused, this may or may not create a visible imperfection in the result.



Stop the current job. The head will return to the job origin. If started again, the entire job will run from the beginning.



Invokes the menu system on the LCD. Generally, you won't need this.



Brings up a directory of named files stored in the laser's controller. The file named LIGHTBRN contains the last job sent from LightBurn using the Start button. Select a file to see a preview of the job. Choose U disk+ to see the files on the USB drive. Many other functions available on-screen.



Shows settings for max power1, min power1, max power2, and min power2. The power2 settings are not used, since our laser has only one tube. The max and min power1 settings are used only if you run a job from the keypad.



Set speed in mm/second. Key in the speed you want and Enter to make it take effect. This speed is used when moving the head around using the arrow keys.

If you hit Speed while a job is running or paused, you can override the current speed.



Used in many places to complete an entry and have it take effect. Use Esc if you don't want it to take effect.



Move the laser's bed up or down. When moving up, be careful that the honeycomb grid (or anything placed on top of it) does not snag on the slight overhang around the chassis edge. When moving down (more than a few inches below chassis level), open the front access doors and watch to make sure not to crash the bed into the mechanism.

Note you can also do this on the Move tab in LightBurn, which also allows you to set a specific distance to move.



Does nothing. Our laser doesn't have a U axis.



Move the laser head left or right (X axis), forward or rearward (Y axis). Note you can also do this on the Move tab in LightBurn, which also allows you to set a specific distance to move.

When a menu is active, these keys move up and down within the menu and select desired settings.



Toggles the action of motion keys between a single, fixed distance and continuous operation as long as the key is held down.

Common Operations

- Use the Z down key to move the bed down far enough that the laser head will clear the material and weights. Place the material under the laser head and hang the focus tool. Carefully use the Z up key to move the bed up until it just touches the bottom of the focus tool.
- Use the arrow keys to move the laser head around.
- If the laser head is moving too slowly or too rapidly when you use the arrow keys, use the speed key to change the speed.
- Really, you probably want to do everything else from LightBurn and not from the keypad, except in special cases.

In Case of Fire

- Use the Start/Pause key to pause the job.
- Use the arrow keys to move the laser head away from the fire.
- Put out the fire!
- If you want to continue the job (and judge it to be safe to try) use the Start/Pause key again to restart it. The laser head will return to where it left off and resume the job.
- Otherwise, use the Stop key to end the job and adjust the settings to prevent the fire from starting again.