The Control Panel on the Epilog Mini and Helix provides a multitude of features that are all accessible from this one, handy tool. Below we will discuss the different areas of the control panel and what each one does.

Display

The display shows valuable information associated with the highlighted Functional Menu items. We will explain the different information that will be displayed as we go through the description of each menu item.

▶ Go	≡ Job
▮▮ Pause	✳ Pointer
↩ Reset	X/Y Off
Speed	Machine Settings
Power	Data
Focus	
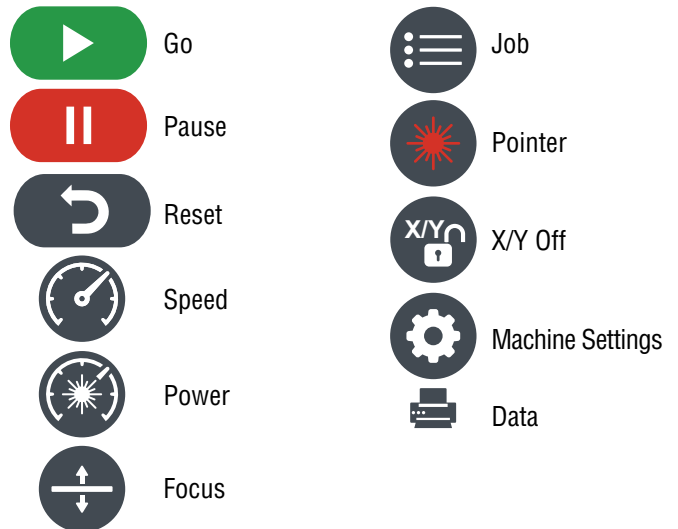
Button Functions

Go Key ▶

- Press the Go key to start or resume a job. Once the job starts, the display changes to show a job timer and the engraving resolution. The timer is a useful production tool that displays the elapsed time of engraving.

00:00:12   500 DPI

Pause **II**
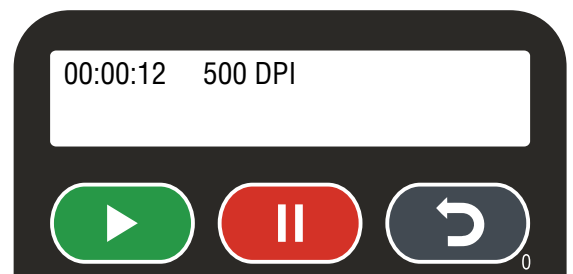
- Pressing the Pause key will pause the lens carriage and the laser beam will be shut off. If the Pause key is pressed during raster engraving mode the lens carriage will stop on either the far left or far right of the engraving line that is in process. If the Pause key is pressed while in vector cutting mode, the lens carriage will stop at the end of a line segment or at the next line node location.

- Once the lens carriage has stopped, you can open the door to examine the engraving. By closing the door and pressing the Go key, the engraving/cutting job will commence where it left off. If the item being engraved is not moved the engraving/cutting registration will not be affected.

- **Note:** Opening the door on the laser during engraving or cutting will stop the laser from firing; however, the lens carriage will continue to move. It is important to stop the job before you open the door to ensure the engraving/cutting is completed.

- If you press the Pause key while in vector mode it may take some time for the system to actually stop. The system needs to get to the next node in a vector before it can stop.

Reset ↺

- Pressing the Reset key will move the carriage back to its Home Position. Press the Reset key after you have pressed the Pause key, or after you have moved the carriage when using the X/Y off function.

- Reset does not erase the job from the laser systems memory; rather it will stop the engraving job in process and send the carriage back to the Home Position.

Speed

During an engraving job or when the laser is idle at Home Position, the speed of the job can be viewed on the control panel by pressing the Speed key. In raster mode you can change the speed on the fly. Speed can only be changed on the fly in raster mode. You cannot change the speed on the fly during vector cutting.

Pressing the Speed key while engraving will change the display to show the speed setting of the job while it is running (see image above). Pressing the Up or Down arrow key will increase or decrease the speed of the carriage. Normally you will need to increase or decrease the speed by 10% or more before you start to notice a visible change in the speed.

Changing the speed on the fly is a useful way to experiment to get just the right speed setting for a material you are not used to engraving. You cannot change the speed on the fly in vector mode.

Power

During an engraving job or when the laser is idle at Home Position, the power of the job can be viewed on the control panel by pressing the Power key. In raster mode you can change the power on the fly, but you cannot change the power on the fly during vector cutting.

Pressing the power key while engraving will change the display to show the power setting of the job while it is running. Pressing the Up or Down arrow key will increase or decrease the power output of the laser in raster mode. Normally you will need to increase or decrease the power by 10% or more to see a visible change in the laser's speed.

You can also change the power from the laser system when it is in idle mode. To do this, press the Power key, then press the Up or Down arrow keys to change the power. Press Go and job will run at the changed power setting.

Focus

Pressing the Focus key allows the operator to raise or lower the table by pressing the Up or Down arrow keys. When in Focus mode, the LCD displays a digital readout of the relative location of the table.

You can zero-out the readout by pressing the Up and Down arrow keys simultaneously to generate a relative position of 0.000. This is useful for determining exactly how from nominal focus you would like to be. Some materials, like acrylic, are better engraved when slightly out of focus.

To manually focus anywhere on the table see the description for the X/Y Off key for a full explanation of this feature.

Job

Pressing the Job key displays the file name of the last job stored in memory. After pressing the Job key, pressing the Up or Down arrows allows the operator to scroll through all of the saved jobs that are stored in the laser system's on-board memory.

You can loop continuously through all of the jobs stored in the laser system. Pressing the go key will start the job that is displayed. The jobs are numbered, so if you send the same job more than once, you will still be able to distinguish it from the other jobs with the same name.

Pointer

The Pointer key is a toggle switch that turns the laser system's Red Dot Pointer on and off. When the Red Dot Pointer is on, the indicator light directly to the left of the pointer key will be illuminated. For more information visit **"Red Dot Pointer" on page 80.**

X/Y Off

Pressing the X/Y Off key and then pressing the Go key disables the X and Y motors and allows the operator to move the carriage by hand to any location on the table. Moving the carriage by hand allows you to perform several different functions:

1. Manually focus anywhere on the table or on the optional Rotary Attachment. To manually focus anywhere on the table, disable the axes by pressing the X/Y Off key. Move the carriage to the desired focus position. Place the manual focus gauge on the carriage and press the up or Down cursor keys on the keyboard to move the table up or down until the focus gauge is just touching your work. Your focus is now set to the proper focus height. After you have focused, press the Reset key to send the carriage back to its park position.

2. Create a new temporary Home Position. Using the Red Dot Pointer helps to locate the precise position where you want your new Home Position to be located. Use the X/Y Off key to move to your new position, then press the Go key to create a temporary Home Position.

Be careful to avoid touching the optics while moving the carriage!

Machine Settings

There are a number of factory settings that normally only need to be set once at the factory to calibrate the system. All of the calibration settings can be accessed using the Machine Settings key. To access the Machine Settings menu, press the Machine Settings key, then use the right arrow to scroll through the options. The Up and Down arrows raise and lower the value.

1. **X Home:** Increasing this value moves X Home closer to the left ruler. Range: -999 to +999.

2. **Y Home:** Increasing this value moves the Y Home closer to the top ruler. Range: -100 to +999.

3. **X R Home:** Increasing this value moves the X Rotary Home closer to the left ruler. Range: -4000 to +7500.

4. **Y R Home:** Increasing this value moves the Y Rotary Home closer to the top ruler. Range -2000 to +9500.

5. **Laser Match:** Establishes left to right vertical alignment of alternating raster lines. Range -20 to +20.

6. **Stamp Match:** Establishes left to right vertical alignment of alternating raster lines for stamp mode. Range -20 to +20.

7. **Sys Units:** Choose between inches and millimeters.

Data

This light will illuminate when data is being passed to the laser. This is a handy tool when you are checking to see if your laser is connected to your computer.

Setting a Temporary Home Position / Resetting Home Position

1. To set a temporary Home Position, press the **X/Y Off** key to disable the X and Y motors.

2. Turn on the Red Dot Pointer by pressing the **Pointer** key to see a visible representation of where the laser will fire.

3. Move the carriage by hand to any location on the table, being careful not to touch the optics.

4. Once the Red Dot Pointer is where you want it, press the **Go** key. This is now your temporary Home Position.

5. To reset Home Position, press the **X/Y Off** key and **Reset** key simultaneously.

Two-Key Configuration Menu Items

The Epilog Zing has several additional configuration settings that can be changed with two-key combinations on the key pad. Press the two-key combination, then use the up or down arrows to change the settings. Press the **Go** key to save the new setting.

1. **Laser TM:** Activates laser tickle mode. 0 is off, 1 is most common, if used. Press the **Reset** and **Up Arrow** keys simultaneously. Range: 0 to 3.

2. **Laser TI:** Activates laser tickle duration. 0 is off, 1 is most common, if used. Press the **Reset** and **Down Arrow** keys simultaneously. Range: 0 to 3.

3. **Auto Delete:** Automatically deletes every job after it has finished running or if the job is stopped and reset. The factory default is No. Press the **Reset** and **Job** keys at the same time. Range: Yes or No.

4. **Bed Size:** Sets the bed size of your system. This setting should never be changed. Press the **Reset** and **Machine Settings** keys simultaneously. Range: 16x12, 24x12.

5. **IP Address:** Set your IP Address in the laser using this key combination. Press the **Go** and **Pointer** keys simultaneously.

6. **Reset Home Position:** Resets the Home Position to the factory default. Press the **XY Off** and **Reset** keys simultaneously.

Job Storage: Temporary Memory

While there is no key for this, the laser has the capability to store multiple jobs in temporary memory. The machine will store any and all jobs sent until there is no free temporary memory left. For all practical purposes, there is no limit to the number of jobs you can send to the laser.

Note: Temporary jobs stored in the laser systems will be erased when the laser system is turned off. For permanent job saving, print the file to the Job Manager, where you can file the job for later retrieval along with all settings you used in the past.