



Operation's Manual for Rotary Set Up for LaserCAD

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LaserCAD Rotary Set Up

The rotary, either the roller or chuck type, plug in and work the same way. The Y-Axis is replaced with the rotary axis.

MAKE SURE THE MACHINE IS TURNED OFF BEFORE PROCEEDING

Hardware Rotary Set Up

Remove the Y-Axis connector as shown in **Figure 1**. Then plug in the rotary's 4-pin female connector in place of the Y-Axis connector. For HP-2436 & HP-3655 machines, it is located inside towards the back of the machine labeled **Y-Axis Connector**, as shown in **Figure 1**. Finally, line the rotary up with the gantry (the metal beam where the laser head rests on).



Figure 1

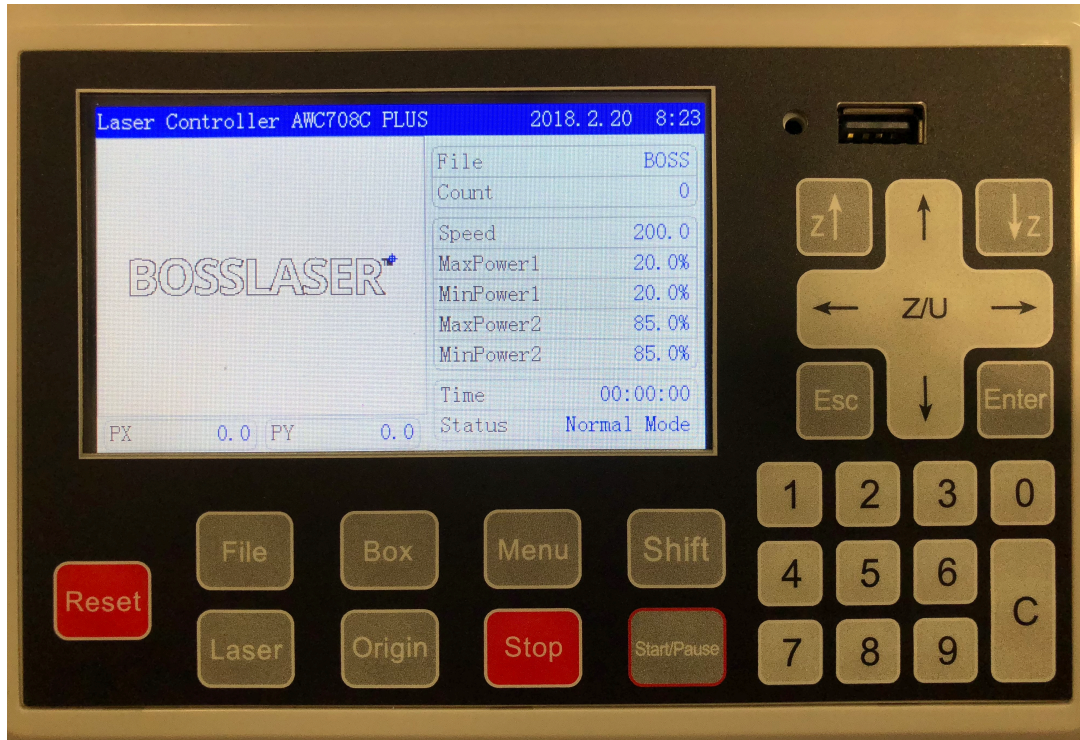
Now turn the machine on and let the laser head return to the home position. Since you unplugged the Y-Axis connector with the rotary attachment, you'll notice that the laser head will only go to the right until it hits the X-Axis limit switch. This is normal and what it should be doing. The same motion needs to be done with the Y-Axis limit switch. To do so, move & push the gantry all the way to the back of the machine to trigger the Y-Axis limit switch. Notice after doing so, the laser head moves to the left and back towards the X-Axis limit switch. You will then need to copy this motion with the Y-Axis limit switch (bring it forward, away from the limit switch, then back towards it). Doing so, the rotary is correctly adjusted with the corresponding coordinates of your worktable and now should be ready to be used. **Note: Throughout the manual, you will be told to press the RESET button. Once pressed, you'll need to do the same motion on the Y-Axis as previous discussed.**

Important!

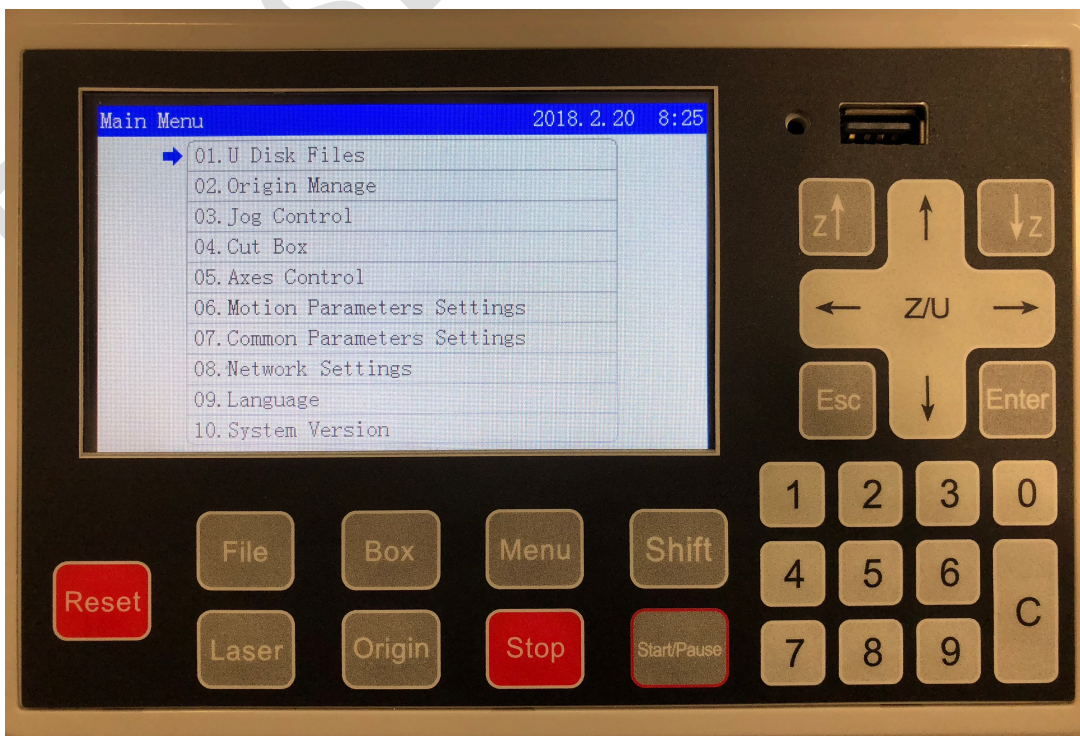
To make sure that your rotary is on the correct orientation, when pressing the **DOWN arrow key**, your object will need to be moving away from you, if not, rotate the rotary 180 degrees.

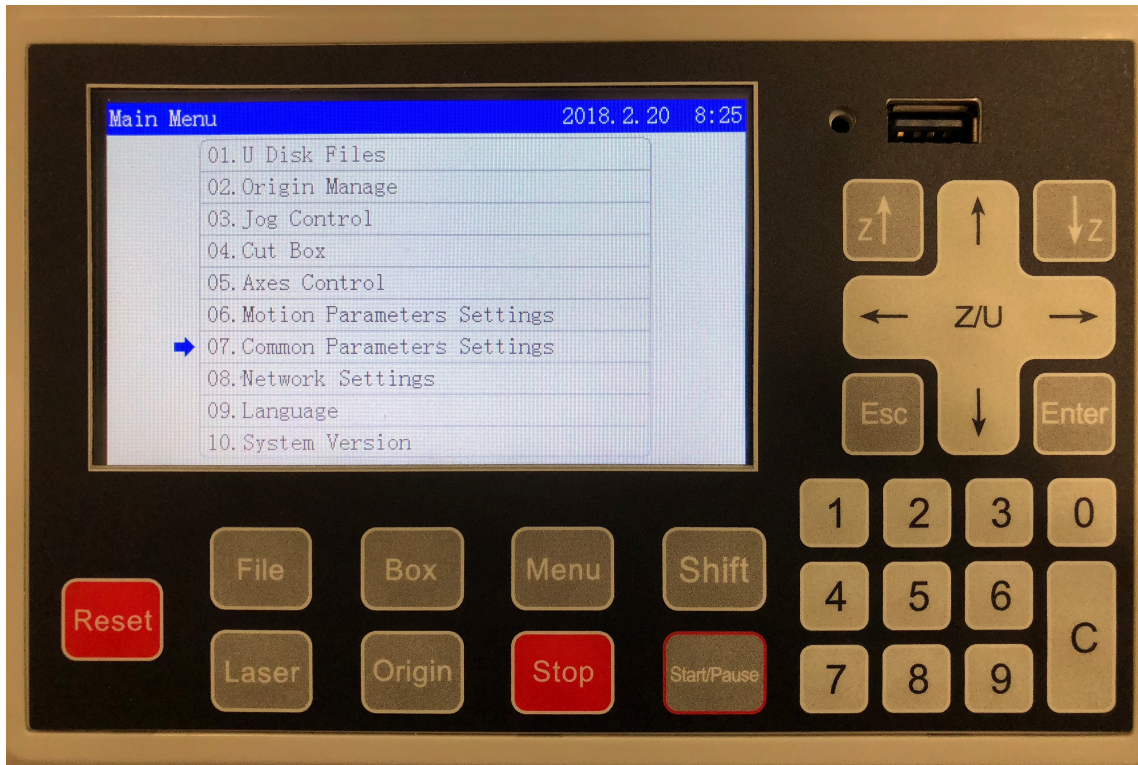
Make sure you have the latest version of LaserCAD (v7.95.5 & up) before continuing

Software Rotary Set Up

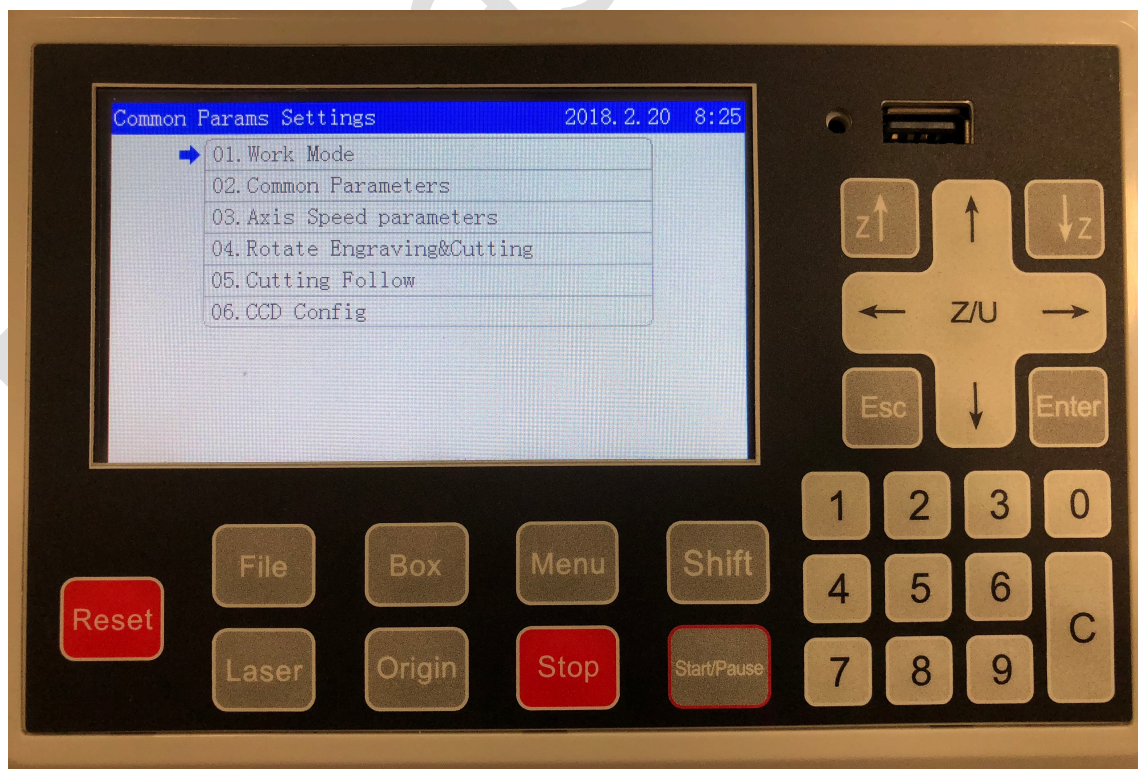


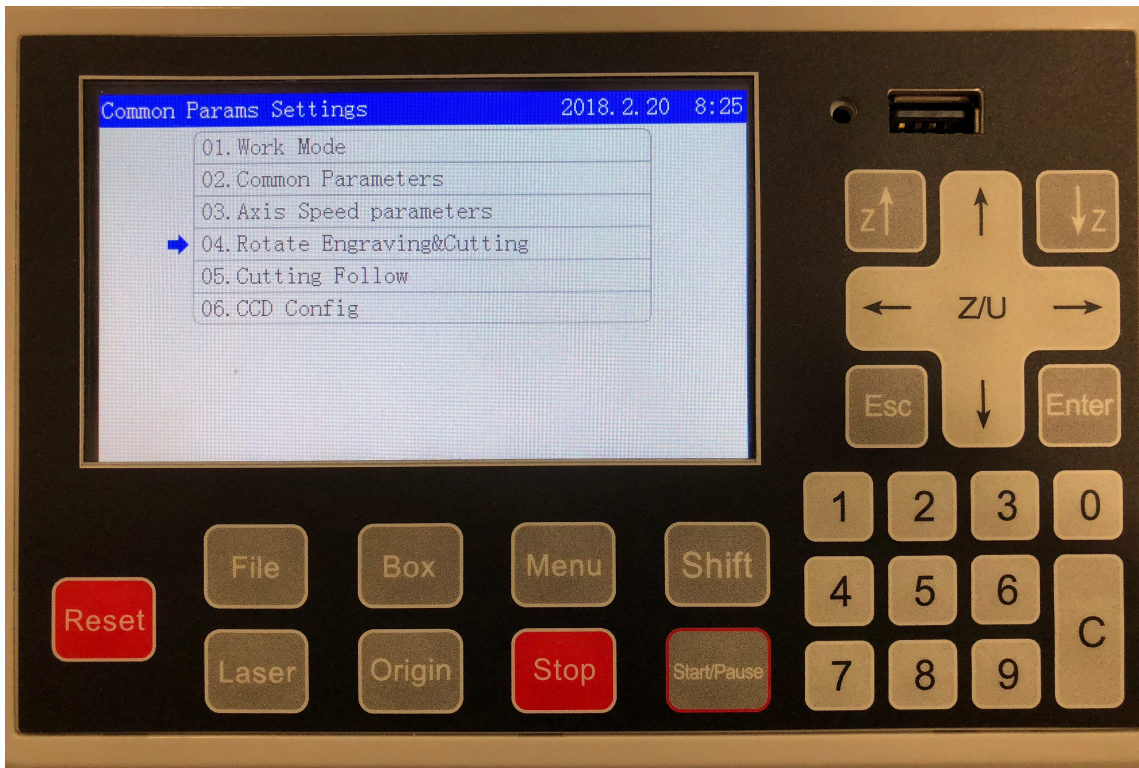
Locate the Control Panel that's on your machine. To properly set up the Roller Rotary, we need to set the correct **Circle Pulse** for the machine. To do this, press the **Menu** button and a list of options will appear (as shown below):



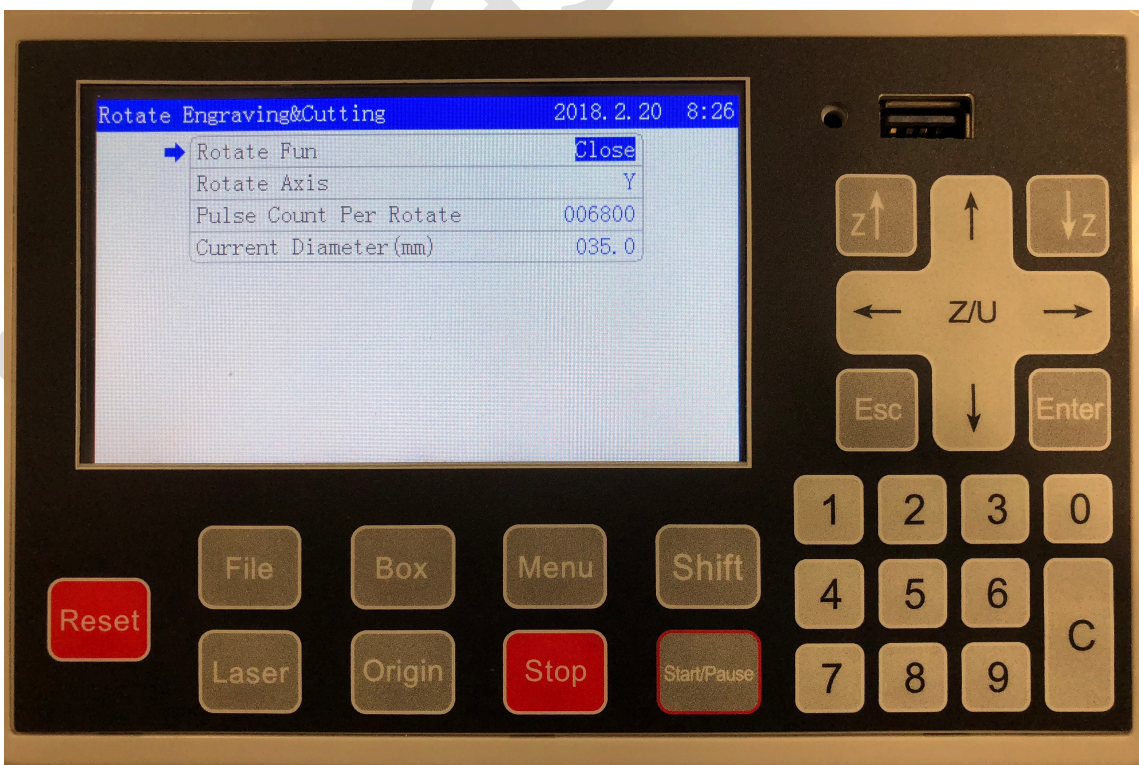


Now select **Common Parameters Settings** using the arrow keys. Press **Enter** and a list of options will appear for the common parameters (as shown below):

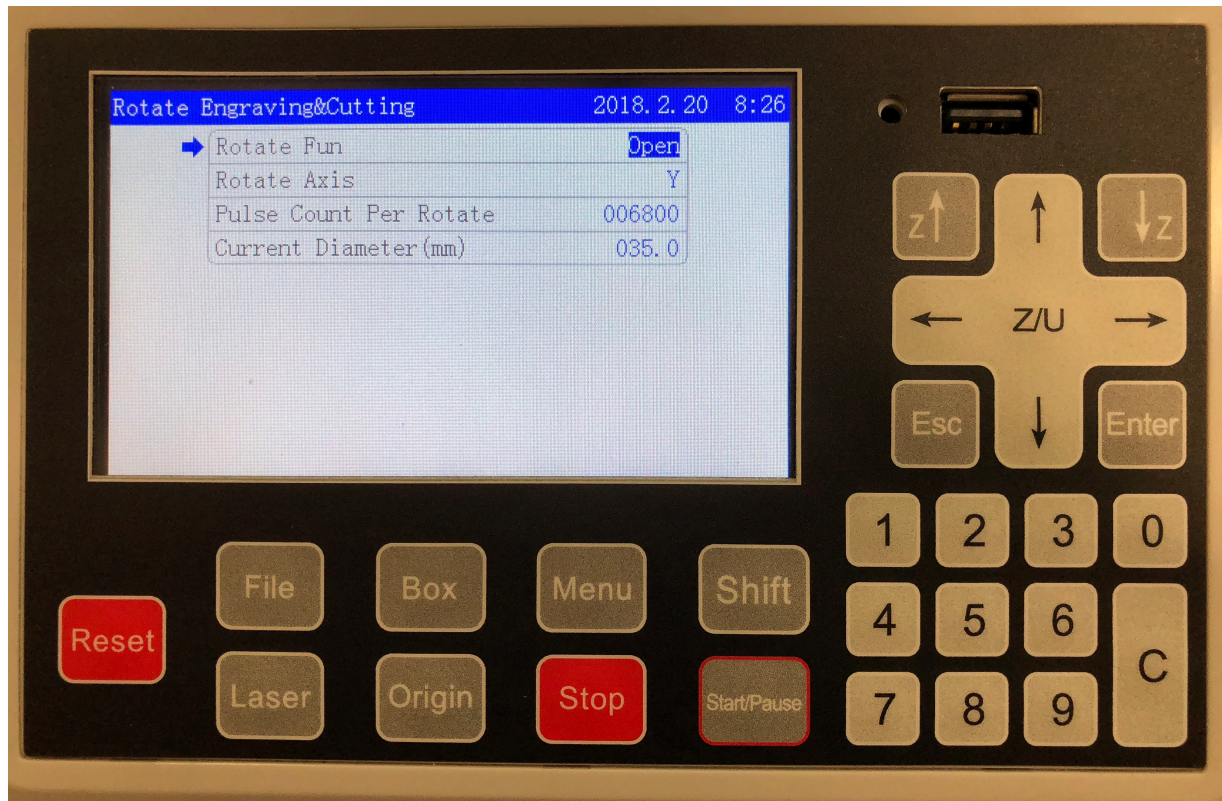




After you are in the Common Parameters Settings menu, select **Rotate Engraving&Cutting** using the arrow keys and Press **Enter**. The below list of options will appear once you have selected this (as shown below):



Roller Rotary

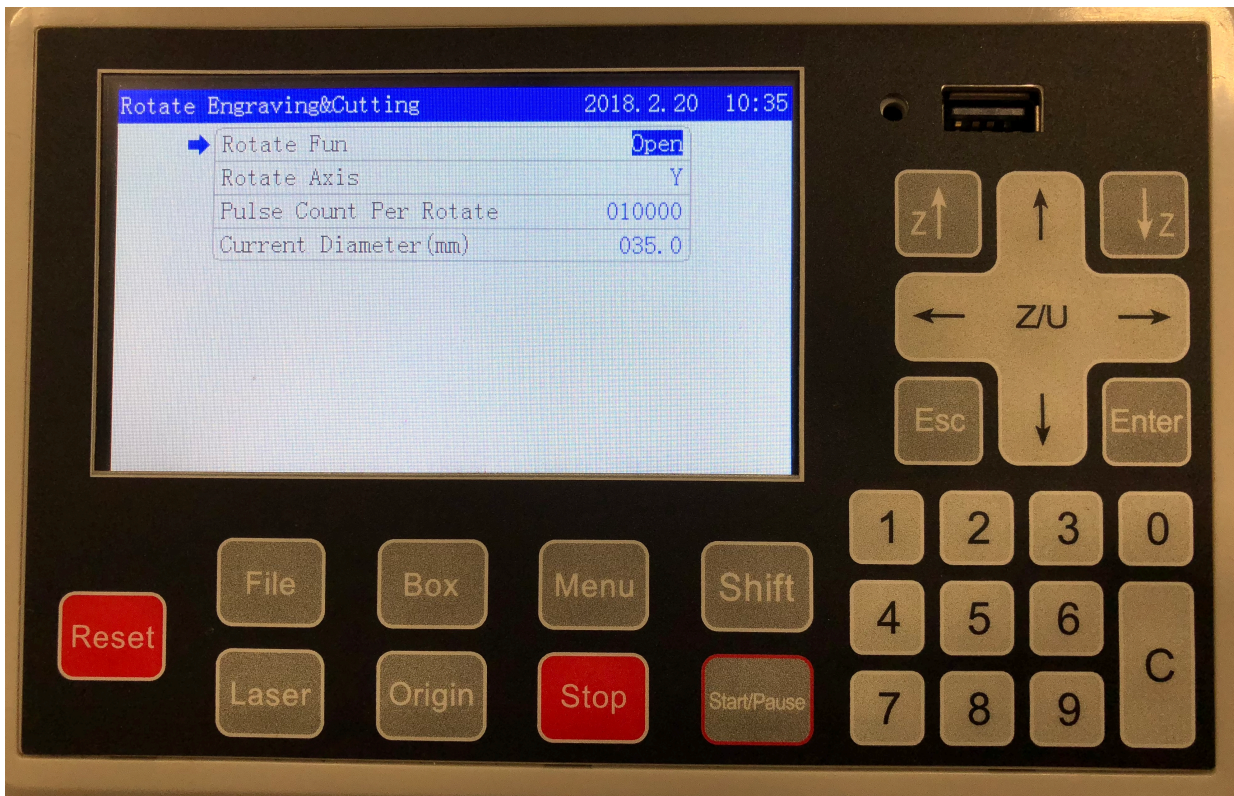


To set up for the Roller Rotary, you will use these parameters (as shown above):

- **Rotate Fun** - Open (Open - Enabled, Closed - Disabled)
- **Rotate Axis** - Y (using the Y-Axis motor)
- **Pulse Count Per Rotate** - 6800
- **Current Diameter (mm)** - 35

The Diameter (mm) is always set and left as 35, no matter what the diameter of your material is **when only using the Roller Rotary**. After you had made those parameter changes, press **Enter** to save those parameters. Now press the **Reset** button so the machine will restart and accept the new parameters. Before running your job using the Roller Rotary, make sure when using the autofocus feature (**using the NON-METAL head**), that the curvature of the material is leveled on the Roller Rotary and that the autofocus is aligned at the peak (top-most surface) of your material.

Chuck Rotary

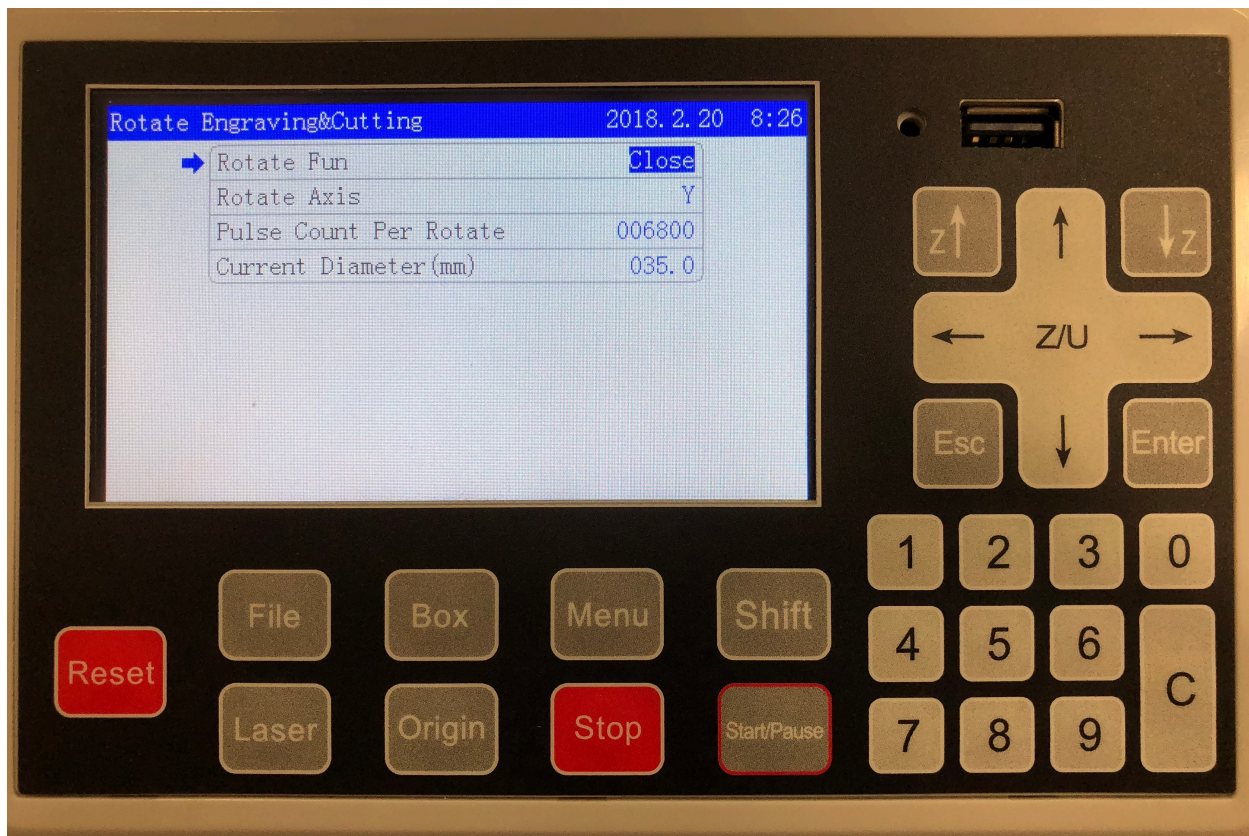


To set up for the Chuck Rotary, you will use these parameters (as shown above):

- **Rotate Fun** - Open (Open - Enabled, Closed - Disabled)
- **Rotate Axis** - Y (using the Y-Axis motor)
- **Pulse Count Per Rotate** - 10000
- **Current Diameter (mm)** - The diameter of your object of the surface being engraved on.

After you had made those parameter changes, press **Enter** to save those parameters. Now press the **Reset** button so the machine will restart and accept the new parameters. Before running your job using the Chuck Rotary, make sure when using the autofocus feature (**using the NON-METAL head**), that the curvature of the material is leveled on the Roller Rotary and that the autofocus is aligned at the peak (top-most surface) of your material.

Going Back to the Worktable



To revert back onto the worktable, go back to the **Rotate Engraving&Cutting** menu and make **Rotate Fun** to **Close** (disabling the rotary). Press **Enter** to accept the changes then turn off the machine. Unplug the 4-pin Y-Axis connect from the machine and plug back in the original 4-pin connect for the Y-Axis Motor (the one prior to this setup).

Remove the Rotary from the worktable and turn back on the machine. If done correctly, the laser head should DATUM to the top right of the machine and position itself to the origin in which was set before.

Now you should have access to your worktable.