

Next Wave Automation

Operations Manual

Digitizer



The digitizer makes it possible to recreate and copy small objects or existing three dimensional images and objects.

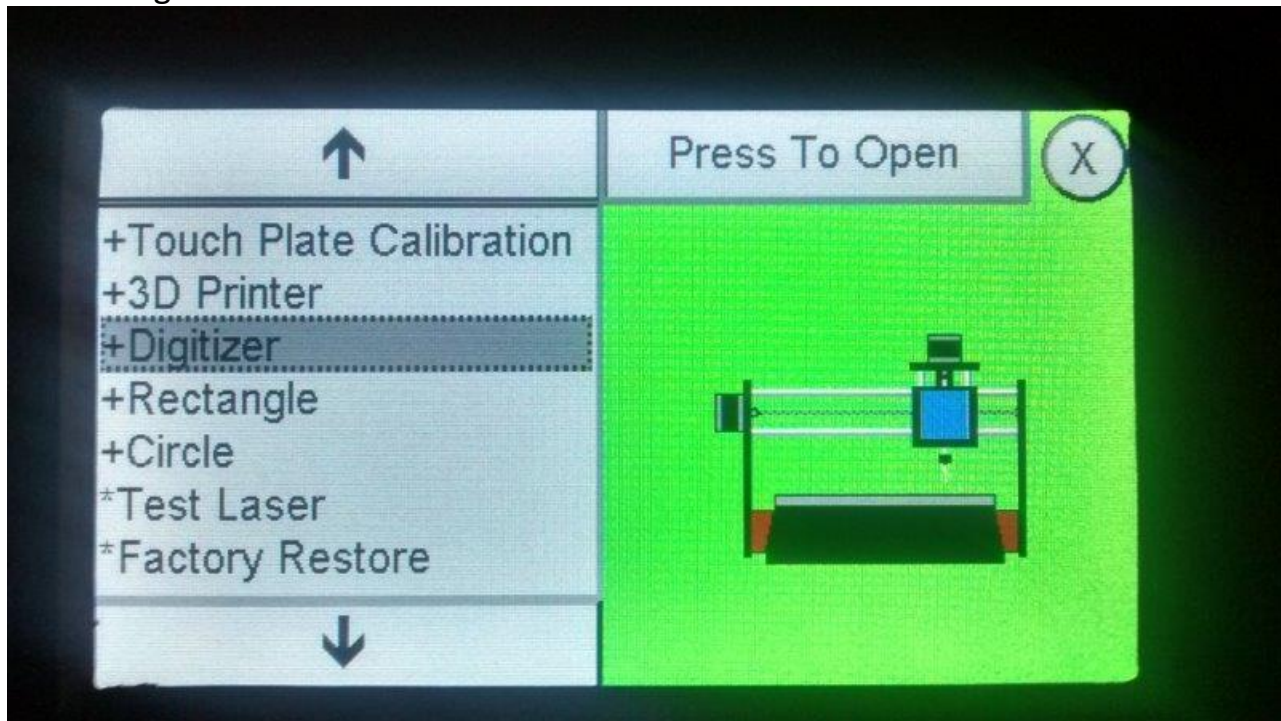
Mounting the digitizer in the router

- Insert digitizer into the ¼" collet
- Make sure the router is unplugged from power
- Tighten the collet until the digitizer cannot move

NOTE: You will need to use the Piranha control panel and or the nextwave 3d viewer to convert the digitizer file to an stl. file

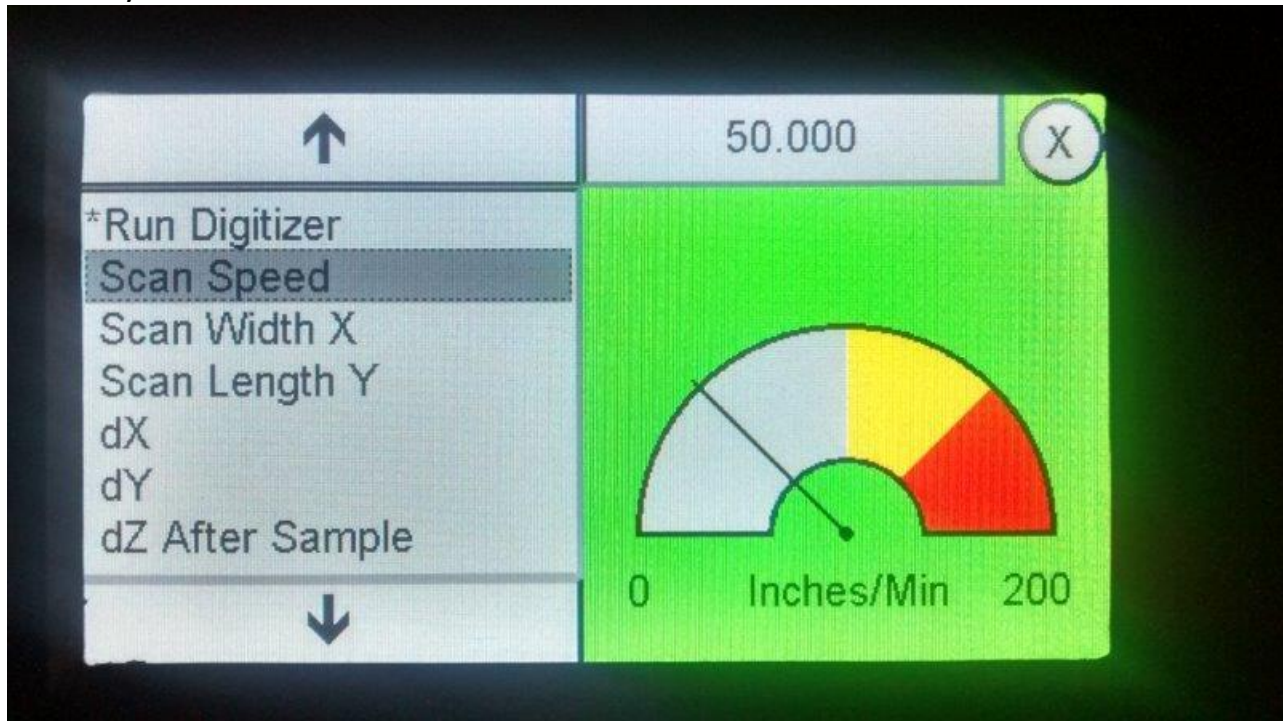
Setting up the Digitizer

- Open apps on the Piranha LCD
- Select "Digitizer"

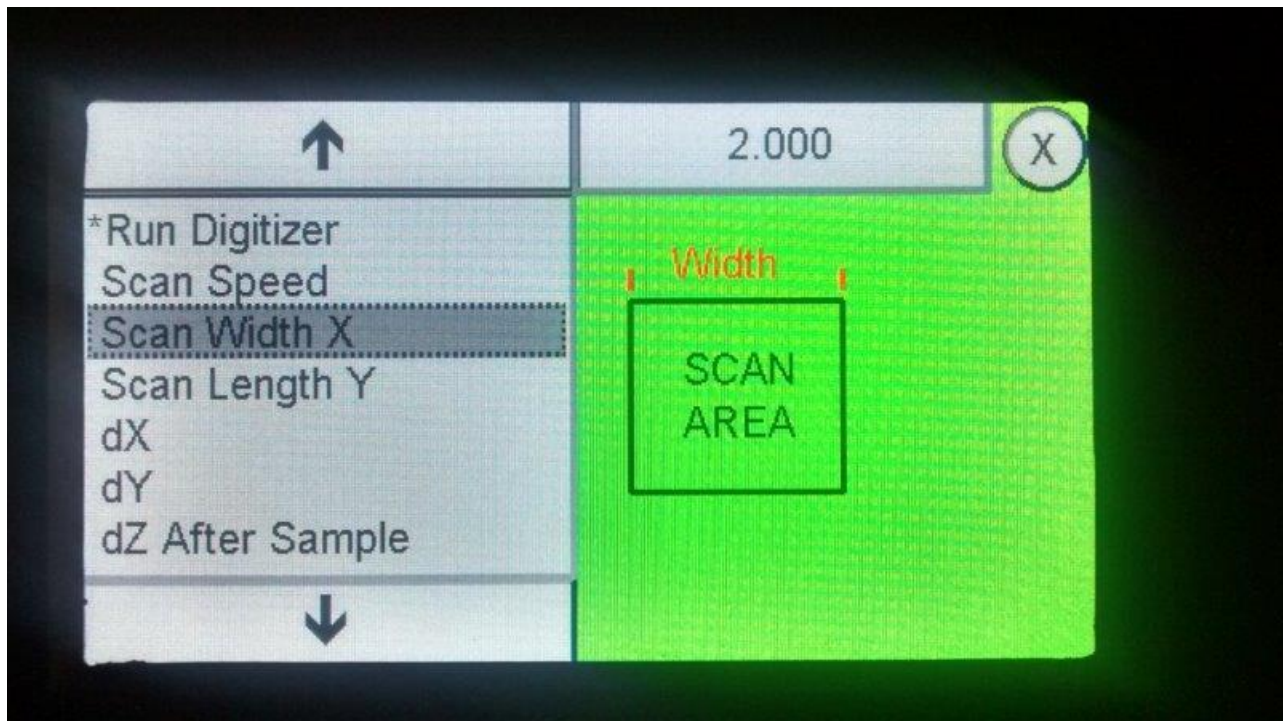


- This will open the digitizer setup menu
- Set your scan speed (the speed at which the digitizer will run)

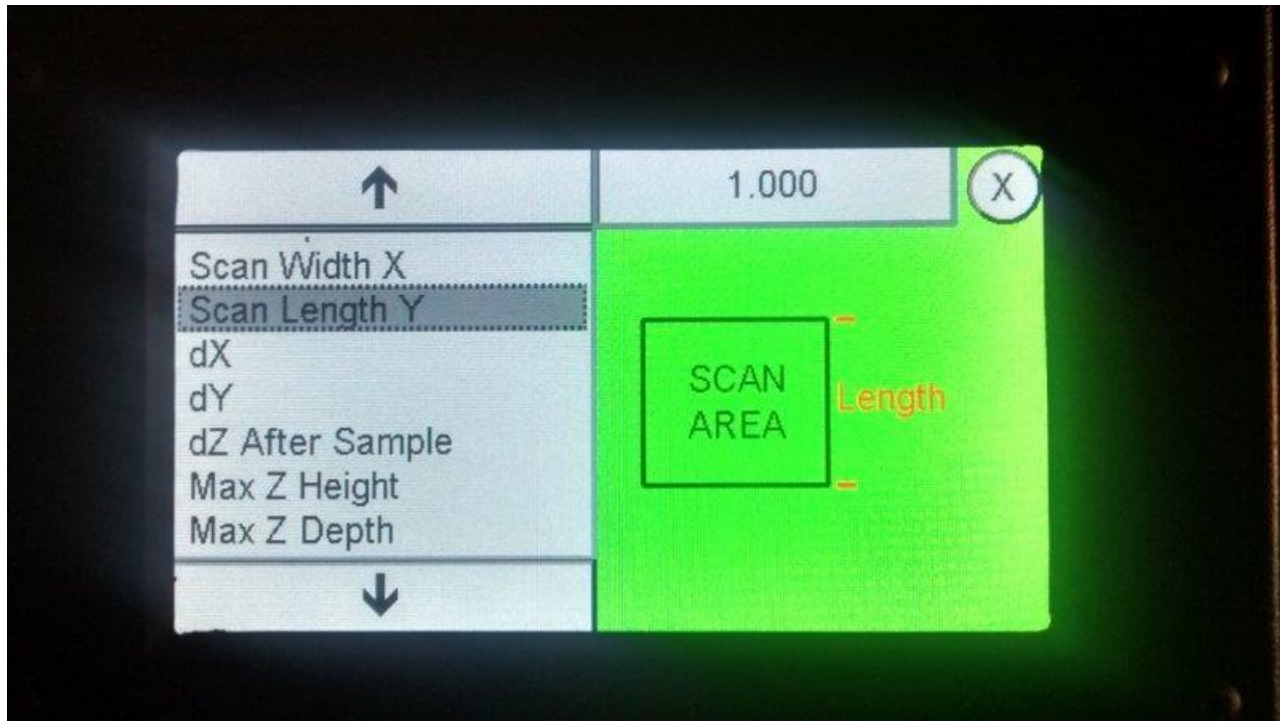
- The slower the digitizer scans, the better the accuracy



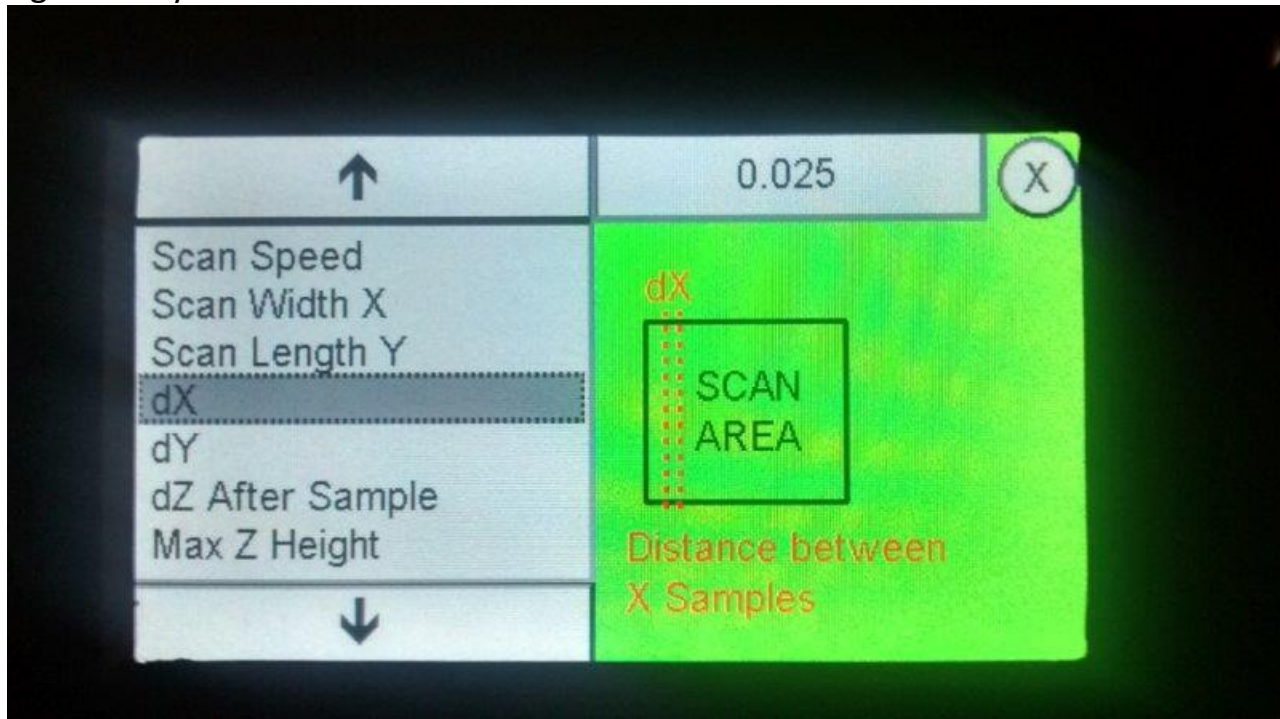
- The "Scan Width X" parameter defines the width of the scan area



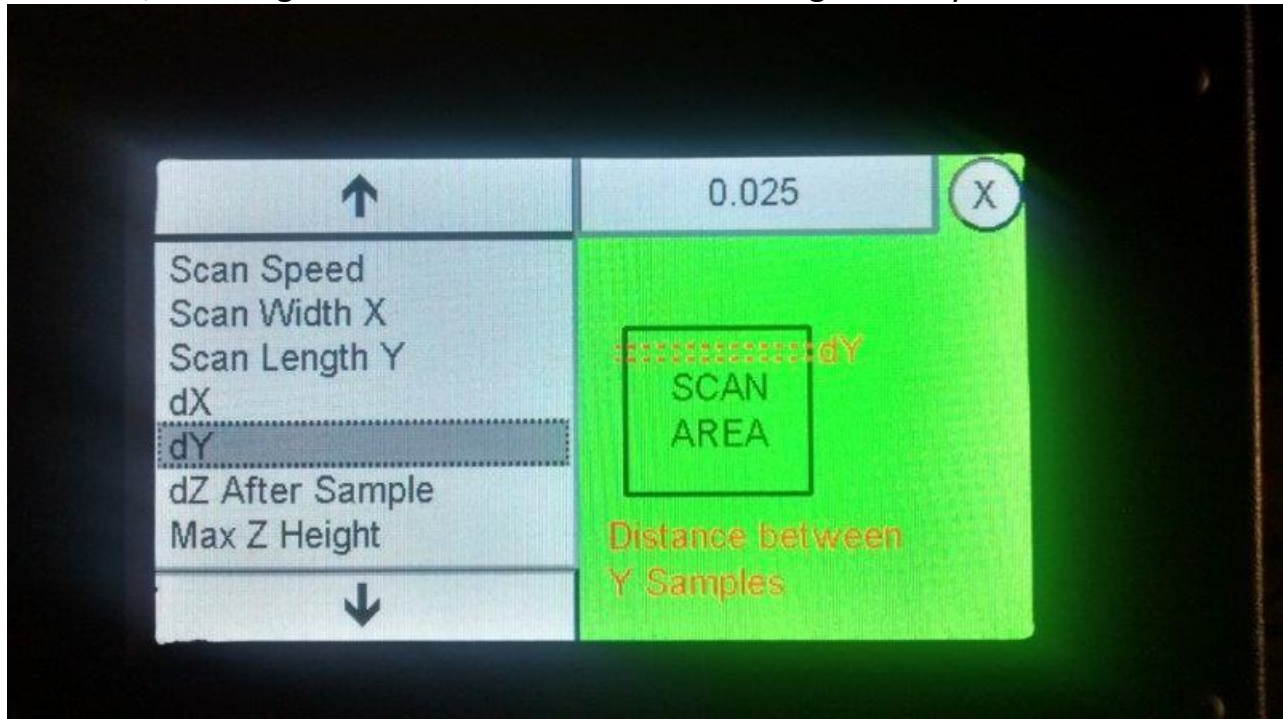
- The “Scan Length Y” parameter defines the length of the scan area



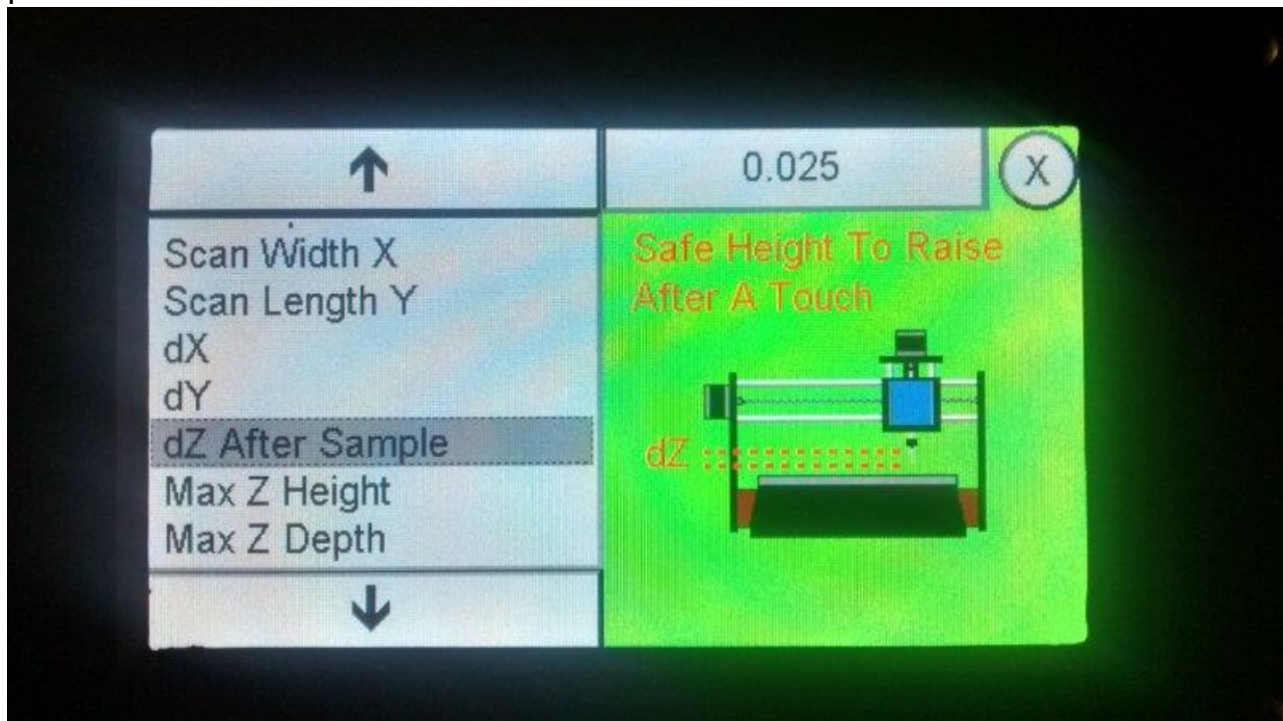
- The “dX” parameter is the distance between X samples of your scan area. The lower the dX value, the more precise the scan will be. However, lowering the dX value increases run time significantly



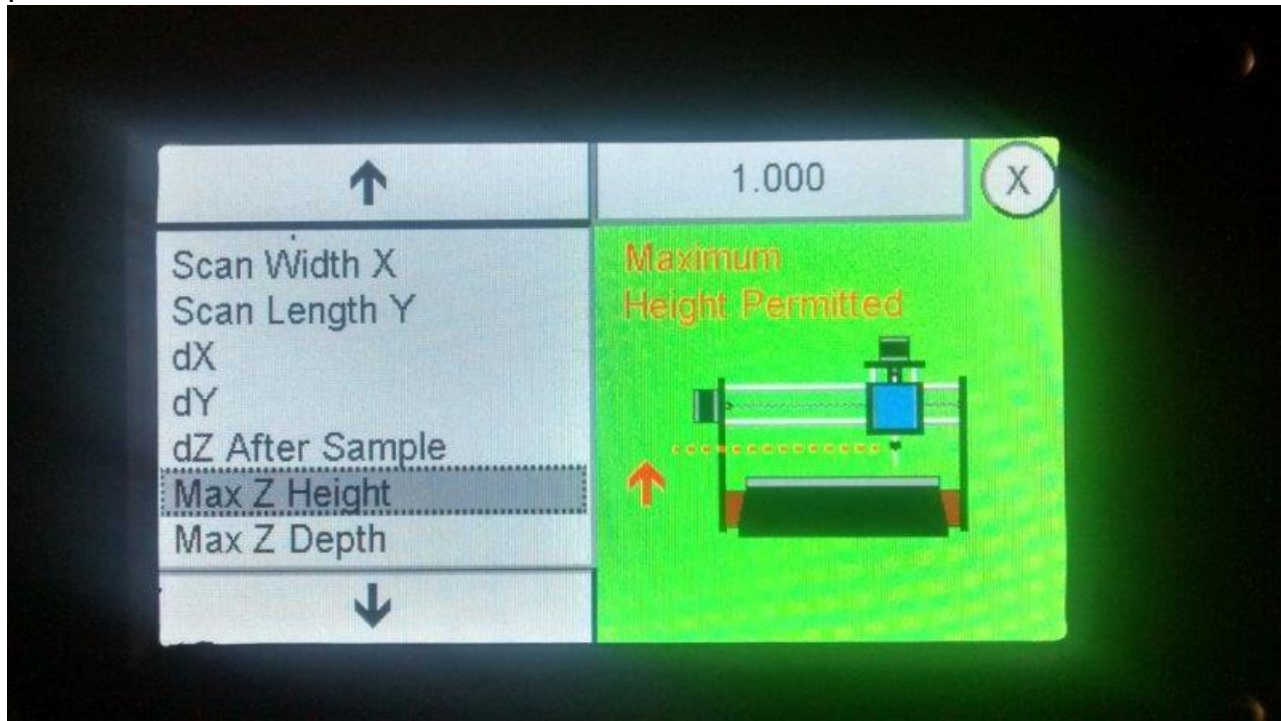
- The “dY” parameter is the distance between Y samples of your scan area. The lower the dY value, the more precise the scan will be. However, lowering the dY value increases run time significantly



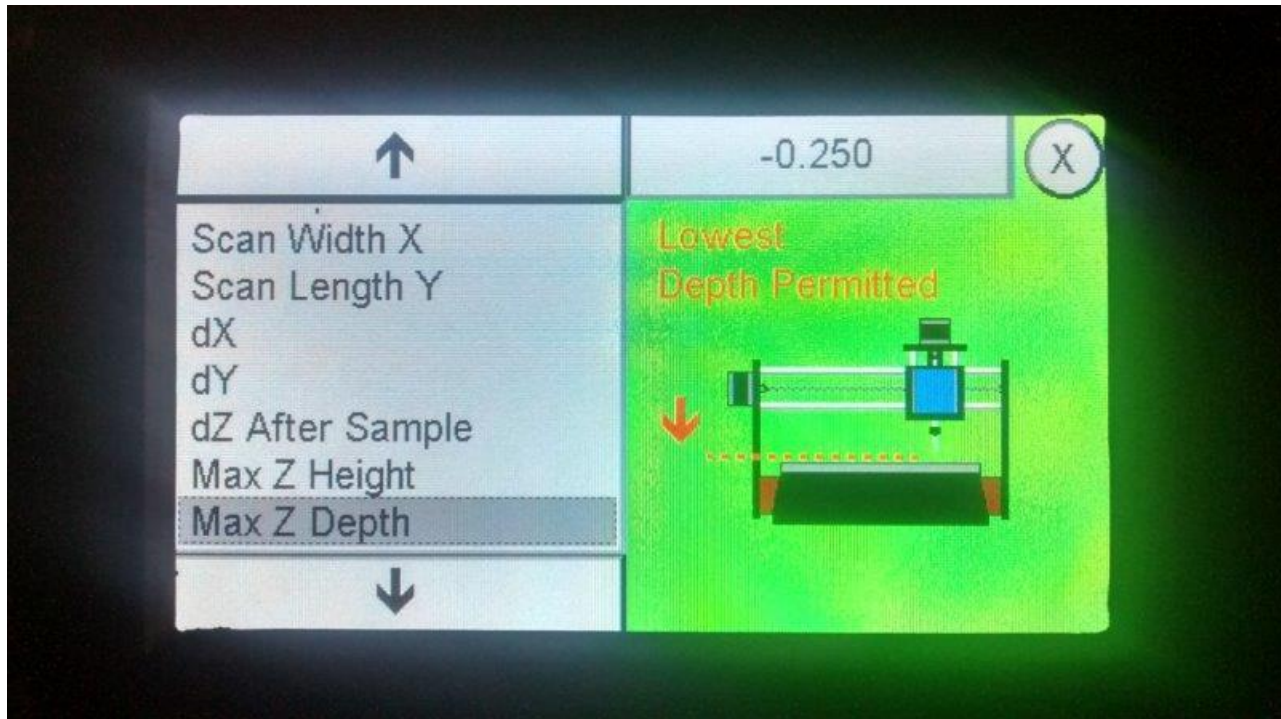
- The “dZ After Sample” parameter is the safe height the digitizer probe will raise after a touch



- The “Max Z Height” parameter defines the maximum height permitted on the scan



- The “Max Z Depth” parameter defines the lowest depth permitted of the scan



Running the Digitizer

- Secure the item you want to scan on the table of the Piranha
- Ensure the Piranha CNC is correctly connected to the controller and powered off
- DO NOT connect the digitizer into the controller until the controller is powered on
- Jog the digitizer until it is barely touching the top of the material in the bottom left corner of the item to be scanned.
- Zero all axis' (X,Y,Z)
- Select "Run Digitizer" on the Digitizer setup menu