

Figure 1

Connect your digital Touch Probe as shown in Figure 1



Figure 2.

Your Touch Probe had a industral ruby attached to the end of the probe. This is required to be attached for the probe to work correctly. Do not remove it.



Figure 3.

Unplug the router from the outlet to prevent it being turn on accendently while the probe is installed in the router.



Figure 4.

Use the control panel to move the router high enough so that the Digital Probe can be installed.

The probe should be install and tighten like any other router bit. It will not be damaged using a wrench to tighten it down. The probe must be in the router securely for it to work properly and make accurate measurements.



Figure 5

In figure 5 you can see the new Scan page for the CNC Shark Control Panel. If you have not installed the new scan software or having trouble installing it. Please see the install Manual.

Now measure the size of your piece you want to scan. Enter the Scan limits into the X Y and Z locations. The Z needs to be slightly larger then what you are planning to scan. It is suggested that if you are scanning a piece that is .5 of an inch in height you do at most 1 inch in the Z location. This will prevent the probe from descending to far down where it might be damaged.

Use The Step Size area to determine how large of steps you want to do in the scan. Entering a .04 is a rough step that gives rough but not a lot of fine detail. Every time you half the size of the step from .04 for instance to .02 will quadruple the time it takes to do the scan. So running it in the larger step at first might be the better way to go. Then you can load it in and check if you want to make smaller scan steps.

Scan Velocity is how fast the scan will move. You enter a number from 3-100 inch per min. Depending on material or how detailed you are doing your scan, you might want to slow the scan down. This will be a trial and error process. Try different speeds to see what the scan looks like when you load it into your viewing software (like Cut 3d).

You need tp move the probe to the start location which is located in the lower left hand corner of the area to be scanned. You need to have the probe tip higher then the highest point you are going to scan. After you have it in position. Then pressing the XYZO to set the Zero start point.





determine the highest point of your artwork to scan



figure 7

figure 7 shows the lowest point in the artwork to scan



figure 8 shows the starting point which is the lower left-hand corner of your artwork to be in the scan.

CNC Shark Control Panel				
Part Coordinates	File	Jog	Scan	
Set XYZ0 X0 Y0 Z0	Scan L	imits		in
X 0.000	Y	1		in
Y 0.000	Z	2		in
7 0,000	Step Sizes			
2 0.000	Х	0.04		in
@ Inches	Y	0.04		in
 Millimeters 	Scan Velocity			
		10		in/min
	Probe Activated			
	Start Scan			
	E-STOP			
Please Load File				

Figure 9

After entering all the scan limits Z. step sizes and scan velocity go ahead and press the start scan.

You'll be prompted to save the file which will automatically default to an STL format and will be saved in a folder of your choice on the drive

. Once the scan is finished go ahead and load the file into a software program like Cut 3-D, Aspire, or a CAD program like Bob CAD or AutoCAD. The program must be a 3-D program in order for it to be shown correctly Vcarve cannot load an STL 3-D file.