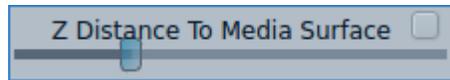


Two Ways Of Using The “Z” Axis

Mode 1: Tux Plot Mode

In this mode you can get the z distance to media surface in two ways, “Probe For Media Surface” function which auto updates your horizontal slider to the distance to the media surface. The icon for this feature is on the right vertical row of icons and is only enabled for the Smoothie/Tux Cutter cnc controllers.



An alternate method of setting Z0 is jogging down to the media surface and using the old fashioned method of a piece of paper between the tool tip and media. If the paper can be moved with some resistance the tool tip is about as close to media as it’s going to get. As you jogged down you will see the slider as shown above is updated so when Z0 is found the slider is already auto adjusted.

The enormous benefit of using Tux Plot mode is that the “Z Distance To Media” is saved/recalled with your job when clicking the save job button. If you have a jig or template to insert blank media into to be machined this decreases production time dramatically! There is no need to set Z0 at all as long as the same template/jig is in use when you saved the job and your tool has a plastic/rubber o-ring sleeve locator to assure the same tool length each time it’s used.



Mode 2: Touch Off Mode

Using Touch Off Mode the “Z distance To Media Surface” shown above is not used at all and the Z0 is set in a more industry standard way using the paper and manually jogging down till contact with paper/media, at this point clicking either the XYZ or Z finger icon buttons sets the axis to “0”. Setting Z0 or X0 Y0 Z0 issues a G92 command which tells the cnc controller to use this location as Z or XYZ start point. Clicking the Touch Off/Tux Plot Mode button will cancel this function and home your cnc devices and return to Tux Plot Mode.

Finding Z0 is needed each time you run a job using “Touch Off” as this value is not saved/recalled with your job as it is in Tux Plot Mode.



The above two modes Tux Plot and Touch Off are assuming your using a Smoothie/Tux Cutter cnc controller and the “Gcode Tux Cutter/Smoothie” Post-processor in your profile.

Gcode Devices Using “Gcode (Generic)” Post-Processor

If your cnc device is a non Tux Cutter/Smoothie based controller and your using the “Gcode (Generic)” post-processor, as recommended, the auto probe for surface feature is not available and only the industry standard “Touch Off” mode is available.

Additional options and features for customizing a non Tux Cutter/Smoothie controller can be found by clicking the “Gcode Specific Tools > Advanced Gcode Settings Panel” in the top menu bar of the Tux Plot window.

Shown below are the gcode optional settings for various devices at this time, additional options may be added in the future.

Gcode Advanced Settings

Gcode Settings For All Gcode Devices

Custom Start Gcode Commands "|"

Custom End Gcode Commands "|"

GRBL Firmware >= 1.1

Gcode Settings For Routers/Mills Only!

Spindle On (Default M3) Spindle Off (Default M5)

True Spindle RPM (If Supported By Your Device)

Plasma Only! "Gcode (Generic)" Post-Processor

Turn On Plasma Gcode Command

Turn Off Plasma Gcode Command

[Open Help PDF On Using “Probe For Media”](#)