Sending and Deleting Files

Tutorial



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FILE MANAGEMENT

Once you have created your Gcode toolpath in Fusion 360 or other CAM software, you will need to transfer it to the machine in order to be able to run it. Note that Gcode files must be 2.5MB or less to transfer. This is also the maximum file size that the processor can handle when it comes time to check the Gcode for errors before running it.

USB MEMORY

We recommend this method over the others discussed in this tutorial. We believe this is the simplest way to go about sending/deleting files. Transferring files using a USB memory stick directly connected to the machine is especially useful if you are using the machine stand-alone with an HDMI screen. The USB port is the lowest port on the machine(see photo below).



Once you have plugged in your USB port, you can navigate to your Gcode in AXIS using the File - Open command and navigating to /media/USB_DISK as shown in the photos below. Once you are in the folder, you will want to view all files to make the Gcode files visible.

	🕅 axis.ngc - AXI	S with MachineKit 0.1 on PocketNC		
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Properties	10110 -	Z: -0.0000 DTG Z: 0.0000		
Edit <u>t</u> ool table		A: -0.0000 DTG A: 0.0000		
Reload tool ta <u>b</u> le	Touch Off	B: -0.0000 DTG B: 0.0000		
Ladder Editor	its	G53 X: 0.0000 G92 X: 0.0000		
Ouit		G53 Y: 0.0000 G92 Y: 0.0000		
Quit		G53 Z: 0.0000 G92 Z: 0.0000		
- +		G53 A: 0.0000 G92 A: 0.0000		
		G53 B: 0.0000 G92 B: 0.0000		
		G55 R. 0.0000		
		TLO X: 0.0000		
Eaad Override	100%	TLO Y: 0.0000		
Spindle Override	100%			
log Speed: 30) in/min	TLO B: 0.0000		
log Speed: 1232	dea/min			
Max Velocity: 39	9.8 in/min			
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3: (depend	ing on your setup. As if y	ou had some material in your mill)		
4: (Hint) 5: (Also p	og the Z axis down a bit t ress the Todole Skip Lines	hen touch off) with "/" to see that part)		
6: (If the	program is too big or sma	ll for your machine, change the scale #3)		
7: G21 G90 0	G64 G40			
9: GCO Z3.0	00000		A	
ION	No tool	Position: Relative Actual	1	
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File name			Open	
			<u>open</u>	
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Files of <u>t</u> ype □ Show <u>H</u> id	e: All files (*)	<u>C</u> ancel

BEAGLEBONE DRIVE

Using the drive on the BeagleBone while you are connected via USB to the machine is another way to store files. To do this, drop your nc file directly into the "BeagleBone Getting Started" drive.



Once you are logged into your machine, click File - Open, and then navigate to /media/beaglebone as shown below to find your files.

🗙 axis.ngc - AXIS with MachineKit 0.1 on PocketNC					
Eile Machine View User Help					
🛛 🔘 🗁 🖉 [>			
Manual Control [F3] MDI [F5] Preview DR0					
Axis: © X O Y O A O B	C Z X: -0.0000 DTG X: 0.000 Y: 0.0000 DTG Y: 0.000 T: 0.0000 DTG Z: 0.000	0 0 0			
Home All	Touch Off 1 A: 0.0000 DTG A: 0.000	õ			
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_ App	s ers ets ement_test_part.ngc	27# }			
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Spindle Over					
Jog Speed: File <u>n</u> a	ame: Open				
Max Velocity	Jog Speed: Files of type: All machinable files (*.ngc,*.png,*.gif,*.jpg,) — <u>C</u> ancel				
Show Hidden Files and Directories					
2: (A) 2: (To run this code anyway you might have to Touch Off the Z axis) 3: (depending on your setup. As if you had some material in your mill) 4: (Hint jog the Z axis down a bit then touch off) 5: (Also press the Toggle Skip Lines with "/" to see that part) 6: (If the program is too big or small for your machine, change the scale #3) 7: G21 G90 G64 G40 8:					
9: GOO Z3.000000		X			
Position: Relative Actual					

DELETING FILES

To see what the Beaglebone sees in this directory open up a "terminal" window and then type in (ls /media/BEAGLEBONE) this command will end up creating a list of what the machine sees in that directory.

If you see files in that list that you tried to remove and couldn't get them off of the machine you can then use this command to remove them. (rm /media/BEAGLEBONE/filename.ngc) This will then delete that file. If you are seeing them on your primary computer you may try shutting off the machine and unplugging the USB cable from the machine for a minute and then reboot the machine. This should then get the primary computer to look at the files again and then you should see that the files have actually been removed.