

# Software Update Tutorial



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## Revision History

V1.0: June 19, 2018 (JD)

V1.1: July 3, 2018 (KN)

V1.2: August 1, 2018 (JD)

V1.3: September 4, 2018 (KN) added troubleshooting section

V1.4: September 14, 2018 (KN) added next SW update

V1.5: February 19, 2019 (KN) added SW update notes

## Introduction

This document contains the instructions for users to upgrade the software that their machine is running

If you have any questions about how to use this tutorial, please contact us [here](#).

## Release Notes for Software Versions

Version	Date	Notes
v4.0.0	February 20, 2019	<p><b>Improved G code program upload/download</b> Prior versions of the UI could only handle files about 2.5MB in size. With this update the UI can handle files over 100MB in size with upload and download indicators to show progress. This allows the Pocket NC to handle programs with millions of lines of G code.</p> <p><b>Spindle clocking</b> For machines with the necessary hardware (machines released around June 2018), the measured spindle speed will be shown in the DRO panel. If the machine doesn't have the necessary hardware (the V1 and V2's released prior to June 2018), the DRO will show the commanded speed with any spindle speed overrides applied.</p> <p><b>Improved metric jogging increments</b> The Jog widget now has sensical fixed step sizes when in metric mode (1mm, .1mm, .01mm and .001mm).</p> <p><b>Improved MDI interface</b> An indicator was added to the MDI input to show when an MDI command was actually sent to the Pocket NC (a green check indicates the command was successfully sent to the Pocket NC). Better error notifications are shown when MDI commands are not successful or are not able to be sent.</p> <p><b>Improved Work Offsets panel</b> Fixed bugs with the Work Offsets panel that would trigger a refresh of the UI and/or to improperly set work offsets.</p> <p><b>Improved workflow for connecting over ethernet</b> The Pocket NC can be connected to a network using its ethernet port, which is required to receive updates. You can also connect to the Pocket NC UI over the network, but it required changing settings in the Conf tab for it to work. Now you can connect to the Pocket NC UI without needing that extra step.</p>
v3.7.0	September 13, 2018	Added a status button to the configuration tab to remove programs and big log files from the Beaglebone Board
v3.3.0	July 15, 2018	Removed unnecessary Power and Stop buttons, renamed

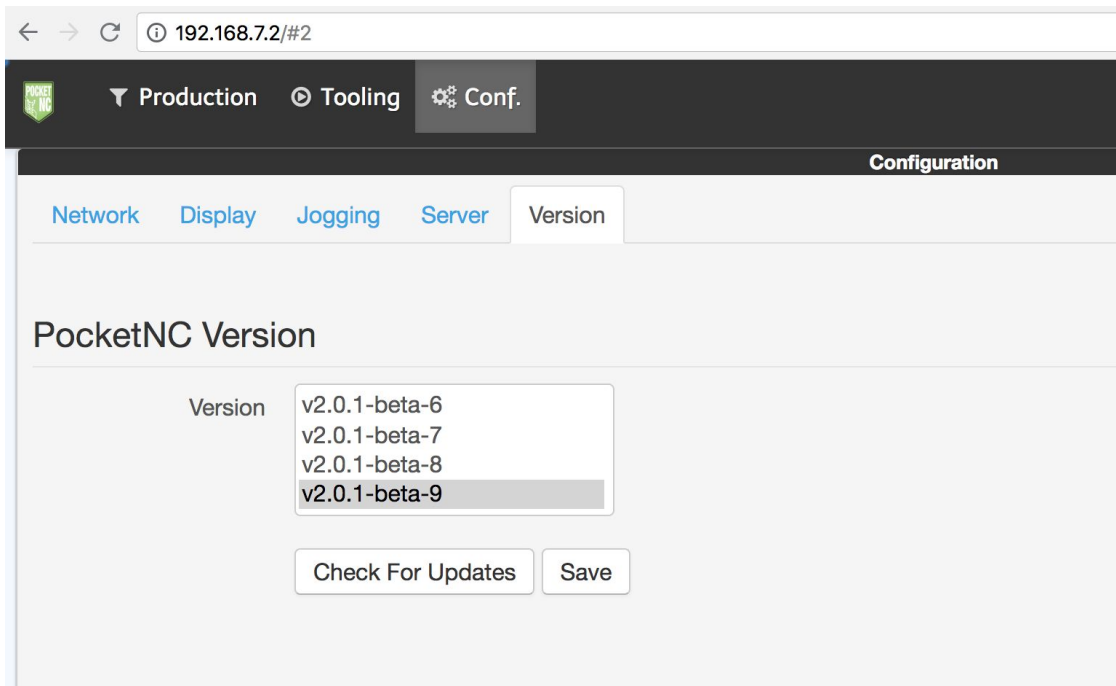
		Shutdown to E-Stop and added a power button for properly shutting down the beaglebone
v3.2.0	July 5, 2018	Improved the compensation table UI for added flexibility in calibrating a machine
v3.1.0	July 4, 2018	Added the ability to upload and download the machine specific calibration data.
v3.0.0 and v3.0.1	June, 2018	Fixed bug that caused UI to freeze if changing tabs after running a program.
V2.0.1-bet a-9 and 10	May, 2018	Fixed tool table issues with units set to mm. Added A and B compensation tables to Linux CNC settings.
v2.0.1-bet a-8	January, 2018	Fix to prevent freezing when large files are loaded.
v2.0.1-bet a-7	November, 2017	Fixed scrolling and better program line number following.
V2.0.1-bet a-3 -6	October, 2017	Can use tool probe after running a program. Fixed ability to delete files before loading a file, fixed update script to properly call pre- and post-scripts.

## Tools Needed

- Ethernet cord
- Ethernet port with internet access

## Section 1: Software Update

You can check the version of the software that you are running by opening the user interface and going to the Conf > Version tab. Scroll down in the version window until you find the one that is highlighted.



If you are running an earlier version of the software, plug in an ethernet cord that is connected to a port with internet access into the ethernet port on the front of the machine. You should see green and yellow LED's light up next to port when the machine detects an internet connection.

Click on the “Check for Updates” button. The machine will populate any new versions of the software into the version window. You may need to wait a few minutes for connection to be established and for the updates to populate. Click on the software version that you would like to install and then click “Save.” The Beaglebone will save the new version of the software then reboot. This process may take several minutes.

**Do not unplug the machine or the ethernet cord while the software is updating!**

As soon as the machine indicates that it is not connected in the bottom left hand corner of the screen clear your browsing cache. On a Chrome browser go to Settings > Advanced > Clear

Browsing Data. You only have to clear 'Cached Images and Files.' This step may be a bit different with other browsers. Then reload the software UI page. Once the machine has rebooted, check that the desired version of the software was installed by going to the Conf > Version tab and checking which version is currently being run.

## Section 2: Troubleshooting

While it can take 5 minutes or so to see the software versions available, sometimes the new versions do not come up. Be sure that you have an internet connection through the ethernet first, but if there is connection and you still don't see the updates try the following:

The Beaglebone doesn't have a battery to maintain a system clock, so it relies on the network to properly set the time. Sometimes it can't establish a connection with the time setting server. The date defaults to Feb 2015, which causes issues with contacting secure sites over https.

1. Go into the terminal window (Mac) or open Putty (Windows - can download this to your computer from the internet - search Putty).
2. We can test that the time stamp is the problem with this command:  
curl <https://www.github.com/PocketNC>
3. If it complains about SSL certificate problems, then the date issue is likely what's wrong.  
Type in the command:  
date
4. Here's the command to set the date to something reasonable (can change it to the current time, but anything after the latest software update date will work):  
sudo date -s '2018-08-29 08:44:00'