# **RELEASE NOTES FOR PATHPILOT V2.7.3**

April 2021

### **ENHANCEMENTS**

#### All

- We improved the diagnostic information that displays when the controller fails to power on because of a depleted CMOS battery. (PP-3173)
- While referencing an axis, you can now use the **Space Bar** key on the keyboard to use the feed hold function and stop axis motion. (PP-3178)
- We added driver support for newer Realtek 8152/8153 Ethernet chips, which provides wider support for USB to Ethernet adapters. (PP-3220)

#### Mills

We updated the ATC firmware to make it easier to align the tool shank or BT30 pull stud with the spindle collet. Previously, adjusting the tray position required incremental rotations in both directions (see Figure A). Now, to compensate for any backlash in the tray position, the ATC always approaches the final target position from the same direction (see Figure B). For example, during forward moves, the ATC slightly overshoots the target position, and then reverses back into position.



IMPORTANT! After you update the ATC firmware, we recommend that you check the adjustment of the tray position for a tool change. Before making any adjustments, keep the spindle collet above the tool shank or BT30 pull stud — when you're adjusting the target position using the -- and ++ buttons on the ATC tab, the backlash compensation move still occurs.

If needed, the MDI command ADMIN ATC BACKLASH OFF disables the backlash compensation.





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### FIXED ISSUES

#### All

- We fixed issues where:
  - In conversational serial number engraving operations, G47 was placed after M30 when coolant was disabled. (PP-3156)
  - In conversational engraving operations, 'GG5x' was added if the text field was empty and the serial number box was checked. (PP-3162)
  - The preview in the **Tool Path** display wasn't updated if a program loaded with an error, which could be misleading. (PP-3163)
  - In simulation/PathPilot HUB configurations, limit switches were prevented from being disabled. This
    sometimes led to an unrecoverable state, like if the machine was jogged into a limit switch before all axes
    were referenced. (PP-3166)
  - A previously selected start line would sometimes be reset after running a long MDI command. (PP-3167)
  - During MDI command execution where keyboard jog commands would cause status messages and, in some cases, abort the MDI command in progress. (PP-3174)
  - Setting the G30 position to an axis G53 zero position sometimes caused G30 commands to generate limit errors that showed very small distance violations. (PP-3203)
  - The G30 position for the A-axis in G21 (metric) mode wouldn't position the axis correctly. (PP-3204)
  - Two display issues occurred with A-axis values in G21 mode:
    - A-axis work offsets were incorrectly scaled up by 25.4 in the **Work Offset** table (but correctly applied during program execution).
    - Feed Rate DRO field showed an incorrect value when only the A-axis was moving. (PP-3199)
- We improved the usability of the Feed Hold button (and its shortcut on the keyboard, the Space Bar key) in several conditions:
  - The Cycle Start button's LED now flashes when the machine is in feed hold during an MDI command
  - Feed hold causes a controlled stop of axis motion during jogging and referencing
  - We also fixed an issue where feed hold could be enabled during jogging, which prevented programs from running until explicitly cleared by a stop or selecting the **Reset** button. (PP-3178)

#### Mills

- We fixed issues where:
  - PCNC 440 configurations didn't support more than one USB I/O module. (PP-3157)
  - In certain situations, the conversational pocket operation could produce problematic tool paths. (PP-3172)
  - When referencing PCNC 440 mills, the **Stop** and **Reset** buttons stopped the currently referencing axis, but didn't stop any other queued reference commands. (PP-3179)
  - Set start line could, in some cases, report a false error when used with a program containing G37 with a non-zero P word. (PP-3195)

• Conversational Edit could silently fail to save a file if one or more operations were posted with Tool 0. (PP-3196)

### Lathes

- We fixed a long-standing issue where, if a set start line was chosen after a G96 command, the maximum spindle speed (D word) would sometimes be ignored until the next explicit G96 line.
   We also improved lathe surface feed and RPM DRO fields so that they show the correct RPM-limited values during manual operations and jogging. Previously, the value in the RPM DRO field showed a value larger than the actual spindle speed for small X diameters. (PP-3165)
- We fixed an issue where the **Collet Clamped** button wasn't useable during M0/M01 stops. (PP-3217)

# MANAGE PATHPILOT VERSIONS

You don't need to install updates sequentially. You can update from any previous version to the current version of PathPilot. Depending on what you want to do, refer to the following sections:

- "Download and Install an Update File from the Controller" (below)
- "Install an Update File from a USB Drive" (on the next page)
- "Install a Previous Version of an Update File" (page 6)

### DOWNLOAD AND INSTALL AN UPDATE FILE FROM THE CONTROLLER

- 1. Confirm that the PathPilot controller is powered on and out of **Reset** mode.
- 2. Downloading and installing an update file requires an Internet connection. From the **Status** tab, confirm that the **Internet** button LED light is on. Then, select **Update**.



Figure 1: Update button on the Status tab.

3. From the Software Update dialog box, select Check Online.



Figure 2: Software Update dialog box.

4. Select Install.



Figure 3: Install button on the Software Update dialog box.

The update file is downloaded, and a notification dialog box displays.

# INSTALL AN UPDATE FILE FROM A USB DRIVE

- From the dialog box, select **OK**.
   The update file is installed on the PathPilot controller.
- 6. Follow the on-screen instructions to restart the PathPilot controller.

### INSTALL AN UPDATE FILE FROM A USB DRIVE

- 1. From the <u>PathPilot support center</u>, download the most recent PathPilot update file.
- 2. Transfer the PathPilot update file to a USB drive.
- 3. Put the USB drive into the PathPilot controller.
- 4. Confirm that the PathPilot controller is powered on and out of **Reset** mode.
- 5. From the **Status** tab, select **Update**.



Figure 4: Update button on the Status tab.

6. From the Software Update dialog box, select Browse.

5	Software Update	
	Check online for latest updates	Check Online
	$\overrightarrow{\mathbf{C}}$ Check online daily for updates; confirmation required for download and installation	
	Update using file on USB drive or revert to a previous version	Browse
	4	Close

Figure 5: Software Update dialog box.

### **INSTALL A PREVIOUS VERSION OF AN UPDATE FILE**

7. From the Browse dialog box, select USB.



Figure 6: Browse dialog box.

- 8. Select the desired update file, and then select **Update**. The update file is installed on the PathPilot controller.
- 9. Follow the on-screen instructions to restart the PathPilot controller.

### **INSTALL A PREVIOUS VERSION OF AN UPDATE FILE**

- 1. Confirm that the PathPilot controller is powered on and out of **Reset** mode.
- 2. From the Status tab, select Update.





3. From the **Software Update** dialog box, select **Browse**.

<b>6</b> ,		
Check online for lat	est updates	Check Online
Check online	laily for updates; confirmation required for download and installation	
Update using file or	USB drive or revert to a previous version	Browse
	4	Close

Figure 8: Software Update dialog box.

# **INSTALL A PREVIOUS VERSION OF AN UPDATE FILE**

4. From the Browse dialog box, select Previous Versions.



#### Figure 9: Browse dialog box.

- 5. Select the desired update file, and then select **Update**. The update file is installed on the PathPilot controller.
- 6. Follow the on-screen instructions to restart the PathPilot controller.