

Instructions for Updating Firmware in *FlexMax* to V1.290



Required:

- 1) PC with open serial port
- 1) Serial cable with PCI-485 interface for connection of PC to drive
- 1) WinPX software
- 1) New version of PXBasic software
- 1) *FlexMax* drive

Set-up:

- 1) If WinPX is not installed on PC, install by running setup.exe file (Disk 1)
- 2) Install new version of PXBasic by running setup.exe file (Disk 2).
Note: To avoid confusion, you should “uninstall” any previous versions of PXBasic on your PC. Be sure to save any files you want to keep in another location.
- 3) Connect drive to PC using serial cable and PCI-485 Interface. The PCI-485 Interface should be connected directly to the PC serial port, and the other end of the serial cable connected to the XS connector on the regulation card. This is the SUB-D connector on the right on the regulation (bottom) card.

Procedure (for updating Ver 1.2xx to Ver 1.290):

Note: All file locations shown are the default locations from the set-up program. If you did not use the default locations, substitute the correct path on your PC in the instructions.

- 1) Power-up drive.
- 2) Start WinPX on PC
- 3) Open C:\Program Files\Powertec Industrial Motors\WinPX\PXBasic\V1.290\PXBasicV1_290.par
 - a. If a message “Parameter version incompatible with drive firmware ...” comes up, click *OK*
- 4) From the *Target* menu, select *Connect* if necessary
 - a. If a message “Parameter version check unsuccessful ... may be dangerous ...” comes up, click *YES*
- 5) To download the parameters currently stored in drive flash memory (if you are not interested in saving the parameters in the drive, skip to step 9):
 - a. Highlight “All parameters” in the left hand menu tree
 - b. Select *Read all* from the *Parameters* menu.

- i. If the message “Parameter identification not used” or “Error reading parameter” comes up (0 - 50 times, depending on FW version), click *OK* and then *Ignore*
- 6) Save parameter file with whatever name you want in
....\V1.290\newname.par
- 7) Re-open C:\Program Files\Powertec Industrial Motors\WinPX\PXBasic\V1.290\PXBasicV1_290.par
 - a. If a message “Parameter version incompatible with drive firmware ...” comes up, click *OK*
- 8) From the *Target* menu, select *Connect* if necessary
 - a. If a message “Parameter version check unsuccessful ... may be dangerous ...” comes up, click *YES*
- 9) From the *Service* menu, select *Load firmware*
 - a. Select *Browse* and locate the file: C:\Program Files\Powertec Industrial Motors\WinPX\PXBasic\V1.290\Service\PXBasicV1_290.sre
 - b. Select and open the file
 - c. Click on the *Load* button. When you get the message “Can’t get hardware release.....Continue anyway?”, click *Yes*
 - d. Message box will say “Erasing flash” and then “Loading”
 - i. Process will take 3 to 30 minutes, depending on how clean your communication is. **DO NOT** interrupt the process before completion. Counter should read 129945 when complete.
 - e. When message box comes up with “Loading completed”, click *OK*, and then click *OK* again to close the *Load firmware* box.
- 10) Reset the drive by selecting *Drive reset* from the *Target* menu, or by clicking on the lightning bolt icon.
- 11) From the *Service* menu, select *Target information*
 - a. After “reading drive parameters”, a box will come up with drive information. Under *Communication*, the *Slink address* may be an incorrect value.
 - b. If necessary, change the *Slink address* to the correct value (zero is default), and click the *Set* button. Make sure the address in *Target: Communication settings* matches the drive address.
 - c. Save the new value into target flash by selecting *Save parameters* from the *Parameters* menu
- 12) Highlight “All parameters” in the left hand menu tree
- 13) Select *Write all* from the *Parameters* menu.
 - a. If messages concerning minimum or maximum values come up, click *OK* and then *Ignore*
- 14) After all parameters have been written, repeat the *Write all* process.
- 15) After all parameters have been written a second time, select *Save parameters* from the *Parameters* menu.
- 16) Reset drive.
- 17) To upload the original drive parameters back to the drive:
 - a. Re-open C:\Program Files\Powertec Industrial Motors\WinPX\PXBasic\V1.290\ newname.par that you created earlier
 - i. Do not save PXBasicV1_290.par
 - b. Highlight “All parameters” in the left hand menu tree
 - c. Select *Write all* from the *Parameters* menu.

- ii. If messages concerning minimum or maximum values come up, click *OK* and then *Ignore*
 - d. After all parameters have been written, repeat the *Write all* process.
 - e. After all parameters have been written a second time, select *Save parameters* from the *Parameters* menu.
 - f. Reset drive.
- 18) From the *Parameters* menu, select *On line mode*
- 19) Check all parameters to ensure they are correct, and then save the parameter file to your hard drive or disk.
- 20) Re-check all parameters to ensure they are correct before enabling drive and running motor.