

Sensapex Micromanipulator and Control Unit Firmware upgrade instructions

Pre-flash requirements

- Sensapex Firmware Upgrade Tool –installed (SFUT). Version 1.0.9 or newer required.
<http://www.sensapex.com/support/downloads-updates/files.html> -> Firmware upgrade software for PC v.1.0.9
- Firmware files downloaded and extracted (.zip file only). The firmware file extension is '**.hex**'.
<http://www.sensapex.com/support/downloads-updates/files.html>
 - o Micromanipulator firmware X.YYY
 - o Control Unit firmware X.YYY

Flashing procedure

- Follow detailed flashing instructions from Sensapex System Manual:
<http://www.sensapex.com/support.html> -> Micromanipulator system manual -> **Chapter 6.2 Firmware updating**

Post-flash registry patching

- Motor Control Unit -flash zip file may contain a registry patch file (.rptc). The final step is to patch the target manipulator registers.
- Step 1, open SFUT Settings:
 - o *Menu -> Program -> Settings...*
- Step 2, select .rptc file:
 - o *Patching Options -> Select... (please select the .rptc file that was included in firmware zip package)*
- Step 3, set target device ID
 - o *Target Device ID -> n (n is the id of target manipulator)*
- Step 4: Accept updated settings and make sure that the SFUT is in idle mode.
 - o Press *Ok-button* -> Settings dialog is closed.
 - o Check that "*pause button*" is not pressed down at the SFUT toolbar. Release the button if needed.
- Step 5: Reboot manipulator
 - o Power off + Power on manipulator from the Control Unit Power switch.
- Step 6: Run the patch
 - o Press '*device data registers*' –button from the SFUT tool bar. You will see the status at the bottom of SFUT main window.
- Step 7: Done
 - o We are done. You can close the SFUT now.