

ASSIST Installation Guide

Check contents of the Evaluation & Programming Tool



EPT002-0000000-0-0 EPT without encoders

EPT002-ID4501L-2-0 EPT with linear encoders and scales

EPT002-IT3402C-2-0 EPT with rotary enc. and codewheels

EPT002-ID1102G-0-0 EPT with speed sensors and gear





Check operation without ASSIST

- 1) Connect the Interface Board to a USB power source (e.g. PC or mobile phone charger)
- 2) Place the encoder in front of the scale/codewheel/gear
- 3) Move the code scale/codewheel/gear and observe the A and B encoder signals on the LEDs
- 4) Use the START/STOP button to turn the encoder on/off

Note: a non-programmed encoder operated without ASSIST has the following configuration:

- Orientation A = 3
- Max speed BB = 01 (Linear 15 mm/s, rotary with TPCD05-064-codewheel 11 RPM)
- Resolution CC = 07 (Linear 10 um, rotary with TPCD05-064-codewheel 128 CPR)
- LUT D = 0

Install ASSIST Software

- 1) Download the ASSIST software from the POSIC website and unzip it
- 2) Run the AssistInstaller_x.x.x.msi (x.x.x. designates the version)
- 3) Upon completion of the installation, your desktop should show the ASSIST-shortcut:
- 4) Connect the Interface Board with the USB-cable to your PC
- 5) Launch the ASSIST Software.
 - a. If the ASSIST Software starts up correctly, you can ignore the rest of this document and refer to the ASSIST Software Manual
 - b. If the ASSIST Software does not start up correctly, the root cause could be:
 - i. wrong USB Driver => see sections Verify USB Driver and Update USB Driver
 - ii. old Interface Board Firmware => see sections Upgrade Interface Board Firmware





Verify USB Driver

Normally the USB driver should be automatically installed by Windows. If this is not the case, please follow the instructions below and on the next page

In the Windows Start Menu open the Device Manager and select Human Interface Devices (HID). Typically several HIDs are active, e.g. for keyboard, mouse, etc.

- 1) Double-click on one USB Input Device (ASSIST is typically the last one)
- 2) In the USB Input Device Properties popup window: select Details
- 3) For Property select Device Instance Path
- If Value = USB\V1D_04D8&PID_F0C0\P045, then the USB-driver is correct. If the value is different, please check the other USB Input Devices under Human Interface Devices.



Update USB Driver

If you have previously used the former version of the ASSIST Software that was based on LabViewTM, then the USB driver might still be the NI-VISA driver instead of the Human Interface Device driver. You can check the driver as follows:

- In the Windows Start Menu open the Device Manager.
- If NI-VISA USB Devices are listed, check if the USB ASSIST Driver is available as shown in the figure to the right.

If the NI-VISA driver is still installed, then update the driver as follows:

- 1) Double-click on USB ASSIST in order to open the Properties pop-up window
- In the USB ASSIST Properties window, select Driver and then select Update Driver. 2)
- In the pop-up menu select Browse my computer for drivers 3)
- In the next pop-up menu select Let me pick from a list of available drivers on my computer 4)
- 5) Device should be added to the Models
- 6) Select USB Input Device and press Next



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Upgrade Interface Board Firmware

Normally the Interface Board is supplied with the latest Firmware version, so it is not necessary to install or upgrade the Interface Board firmware. However, if a new firmware has been released, please follow the instructions below in order to upgrade.

The ZIP-file downloaded from the POSIC website should contain a Firmware-folder with 2 files:

- Executable PC_loader.exe from Microchip[™]
- Hexadecimal firmware code Assist_RAW.x.x.x.hex (x.x.x designates the version)

Load Firmware

- Connect the Interface Board to the PC with the USB cable while holding the START/STOP button on the Interface Board pressed. Once connected, release the START/STOP button. The yellow LED (PROG) should be blinking.
- 2) Start the executable PC_loader.exe
- 3) Enable the USB connection
- 4) Press Connect
- 5) Load Hex File and select the appropriate .hex file in the pop-up menu
- 6) Erase-Program-Verify and wait until the verification has been completed
- 7) Disconnect
- 8) Reset the Interface Board (either use the reset-button or disconnect-reconnect the USB cable)
- 9) Launch ASSIST and verify in the Debug window that the correct version of the firmware has been loaded

Status		Ψ ×
Initialization step:	Done.	
	100%	
	Restart	
✓ Interface ✓ USB connection	Restart board on Ok	^
USB connecti	Restart board on Ok iion v_3.1.4 9	^



