Technical Note TN0007

Sharing USB adapter cables between several OEM modules

PyroScience offers several "OEM modules" which do not have an integrated USB interface, but a so-called UART interface (serial interface), which is especially suited for custom integration e.g. by connecting this UART interface to other microcontrollers. Optionally, USB adapter cables (e.g. FSO2-MINI-USB or PICO2-OEM) are available including a licence for the *Pyro Oxygen Logger* software. When connected to this USB adapter cable, the OEM module can be comfortably configured and operated with a Windows PC. But if a single USB adapter cable should be shared between several OEM modules, the following two issues have to be considered:

- The *Pyro Oxygen Logger* software saves for each specific USB adapter cable (and not for each specific OEM module!) the last configuration (settings and calibration) on the local PC hard disk. When the software is started, this last configuration is AUTOMATICALLY written into the connected OEM module.
- If stand-alone features like auto-mode or analog outputs should be used, the configuration must be saved in the permanent flash memory of the OEM module. This flashing is always automatically done, as soon the Pyro Oxygen Logger software is closed by clicking on the upper right corner of the window. So it is important, (1) first to close the software and (2) first after this to disconnect the OEM module from the USB adapter cable.

Good practice for configuring the OEM modules for the very first time

1. Mark the OEM module with an unique number or name.
2. Connect the OEM module via the USB adapter cable to the PC. Start the *Pyro Oxygen Logger* software. Adjust the settings and perform the needed calibrations.
3. Now click on the button "Save Setup" (lower boarder of the main window) and save the current configuration (i.e. all settings and all calibration information) on your local hard disk. The file name should identify the specific OEM module.
4. Close the software by clicking on the upper right corner of the window, this will flash the current configuration into the permanent flash memory of the device.
5. Disconnect the OEM module from the USB adapter cable (do not perform step 5 before step 4 !).

Good practice for reconfiguring an OEM module

1. Connect the OEM module to the USB adapter cable, and start *Pyro Oxygen Logger*.
2. IMPORTANT: Always click now on "Load Setup", select the previously saved configuration file for this specific OEM module.
3. Do the intended changes in the settings or in the calibration.

4. Now click on the button "Save Setup" and save the current configuration again in the same configuration file.
5. Close the software by clicking on the upper right corner of the window, this will flash the current configuration into the permanent flash memory of the device.
6. Disconnect the OEM module from the USB adapter cable (do not perform step 5 before step 4 !).