TE USB FX2 driver installation (Generation 3)
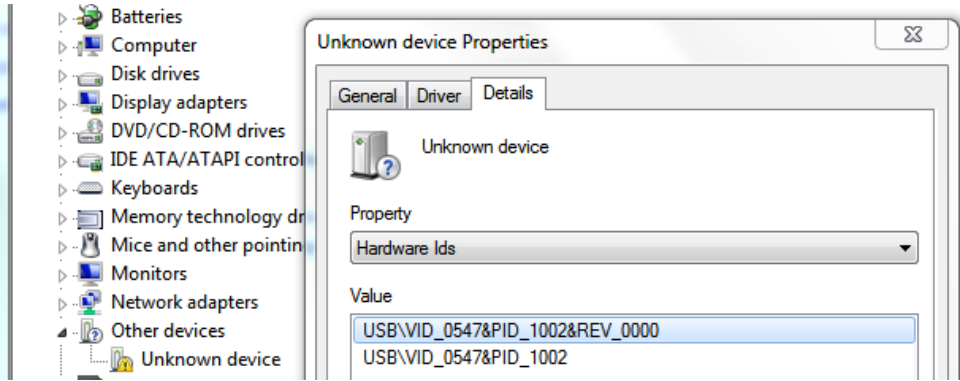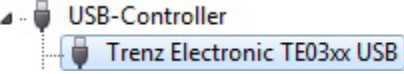
> ✓ To see the device status you should open "Device Manager" using one of this two procedure:
>
> - Start\Control Panel\System and Security\System\Device Manger
>
> - write devmgmt.msc in the line "Search programs and files" to go directly to the Device Manager

If the user needs to use TE API Commands and TE API libraries, he/she needs this driver because this driver is used with USB FX2 microcontroller firmware (Generation 3) (which was already flashed to the supplied TE modules from 2nd September 2013) .
If the USB FX2 microcontroller firmware (Generation 3) is not already written in the EEPROM, you should follow the recovery boot.
If the USB microcontroller (Cypress EZ-ESB FX2) TE USB FX2 driver is not installed on the host computer, then the easiest way to do it, is the following:

- disconnect the TE USB FX2 module if it connected or leave the module unconnected;
- turn off the TE USB FX2 module;

- set "EEPROM" switch to EEPROM connection enabled (EEPROM connected to USB microcontroller) [1];
- turn on the TE USB FX2 module;
    - if the TE0300 module is used, the S2 switch must be set to on (RUN);
    - if the TE0320 module is used, the S1D switch must be set to off (RUN);
- connect (aka plug in, aka attach) the TE USB FX2 module to the host computer through the USB interface;

- Open "Device Manager" using one of this two procedure:
    - Start\Control Panel\System and Security\System\Device Manger
    - write devmgmt.msc in the line "Search programs and files"
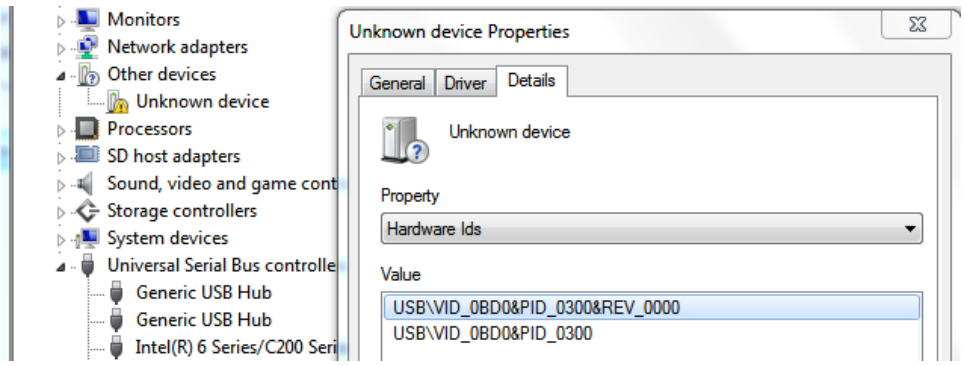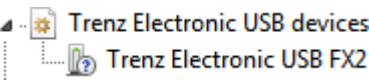 to go directly to the Device Manager
- wait until the operating system detects new hardware; module enumerates in normal mode:
    - Generation 2 case: VID = 0x0547, PID = 0x1002;

Is DEWESoft Trenz Electronic TE03xx USB already installed?	Image of Windows "Device Manager"
❌	
✅	

If the TE USB FX2 module enumerate as Generation 2 you should start a recovery procedure to change the Firmware, otherwise you may need to install the Generation 2 driver.

- Generation 3 case : VID = 0x0BD0 , PID = 0x0300;

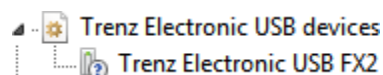| Is Trenz Electronic USB FX2 already installed?	Image of Windows "Device Manager"
❌	
✅	

If the TE USB FX2 module enumerate as Generation 3 you should check if the Trenz Electronic USB FX2 device driver is already installed; if it is already installed the procedure ends here.

- starts the hardware assistant;
- answer the hardware assistant questions as shown in the following document and in this video play lists;
  The driver package contains many folders. During installation, the user shall specify the folder according to 32 (x86)/ 64 (x64) bit distinction and the following table.

host operating system (Microsoft Windows)	device driver folder	automatic/online installation/update
2000, 32 bit	MS-Windows-2000\x86	not available
XP, 32 bit	MS-Windows-XP\x86	not available
XP, 64 bit	MS-Windows-XP\x64	not available
Vista, 32 bit	MS-Windows-Vista+7\x86	not available
Vista, 64 bit	MS-Windows-Vista+7\x64	not available
7, 32 bit	MS-Windows-Vista+7\x86	available [1]
7, 64 bit	MS-Windows-Vista+7\x64	available [1]
8, 32 bit	MS-Windows-Vista+7\x86	available [1]
8, 64 bit	MS-Windows-Vista+7\x64	available [1]

Device driver folder selection

- Check that, in the "Device Manager" under "Trenz Electronic USB devices", the "Trenz Electronic USB FX2" has been added.

"Trenz Electronic USB FX2" device driver installed

⚠️

⚠️ Please compare your *Device Manager* window with the pictures shown in the UM-Drivers-TE_USB_FX2 manual. In particulare, check that the picture shown in section *2.1.3 Common to Windows XP/7/8 (Final Part)* matches both device class name and driver class name in your *Device Manager*. If not, this is probably because the operating system links/loads the old driver class and driver file(s). In this case, it might be useful to go to C:\WINDOWS\system32\drivers (or the like) and delete TE03xx* files. The intended driver file names are "TE_USB_FX2_xx" instead:

- TE_USB_FX2.cat
- TE_USB_FX2.inf
- TE_USB_FX2_32.sys
- TE_USB_FX2_64.sys

Now, Cypress firmware update tools (Cypress USB Console recovery boot,Cypress USB Control Center recovery boot) and OpenFutNet (OpenFutNet recovery boot) can read and write the EEPROM.

Now, the user can use TE API Commands and TE API libraries.

(1) Refer to your module manual for switch location.

(2) Driver installation on Microsoft Window 7 and Microsoft Window 8 can be performed automatically (on-line). It is possible that the first online driver installation fails; in this case the developer shall force a retry (the second attempt normally works). See UM-Drivers-TE_USB_FX2 manual at section *2.1.2.3 .2 Force the online search*.