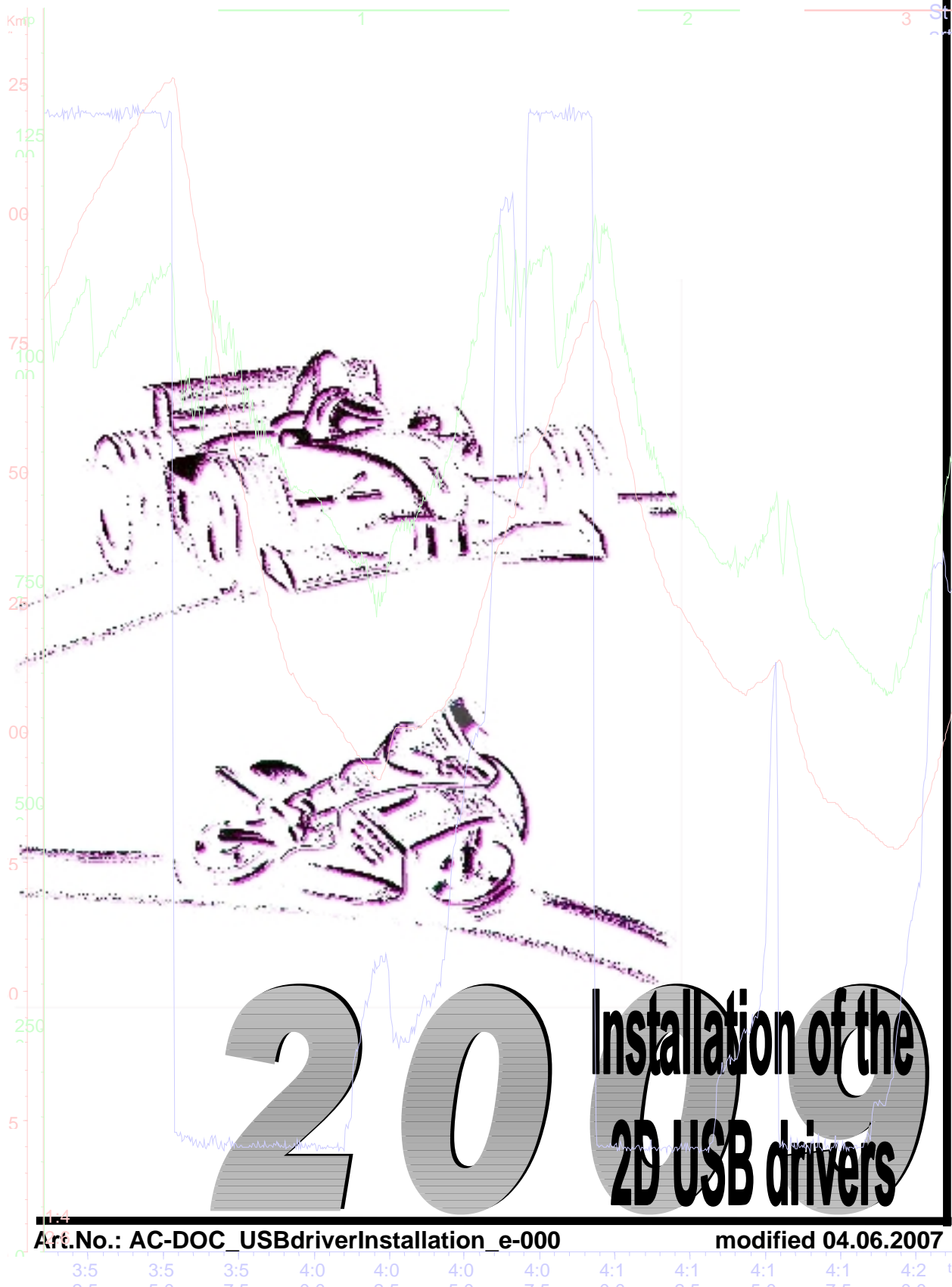


- English -



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## 1. Installation of the 2D USB drivers

### 1.1 What to keep in mind when install the 2D USB drivers from our CD ?

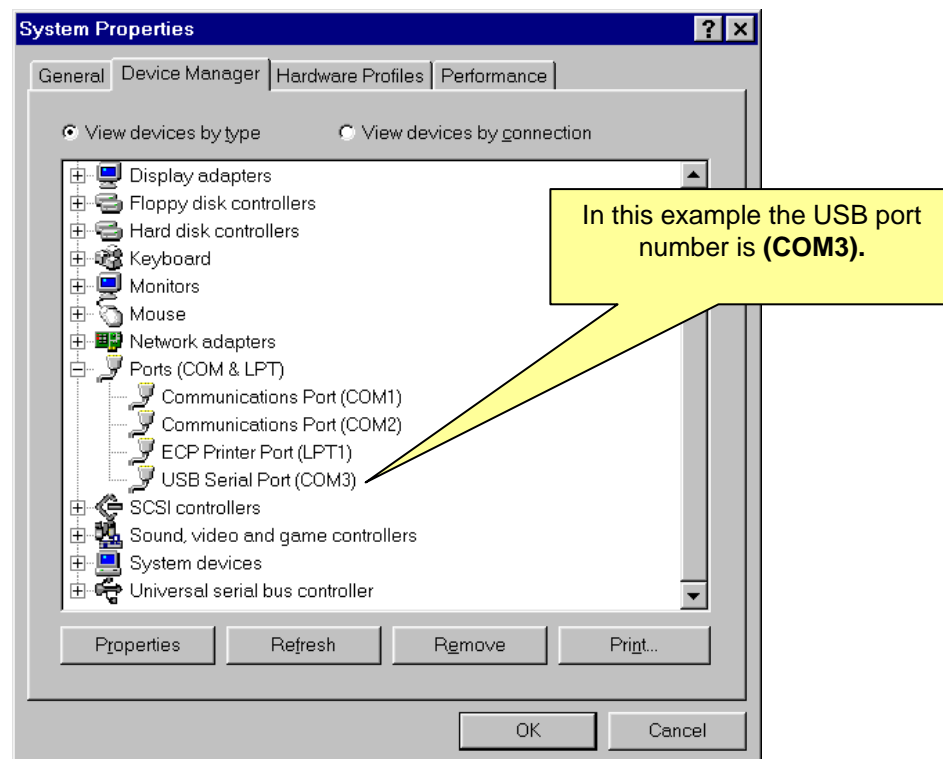


Before starting with the 2D USB driver installation please check if it's necessary. You must install the 2D USB drivers only once. You can check this easily and quickly via the *device manager*. If necessary you must remove the USB drivers if you want to update them.

To start the device manager follow the next instructions.

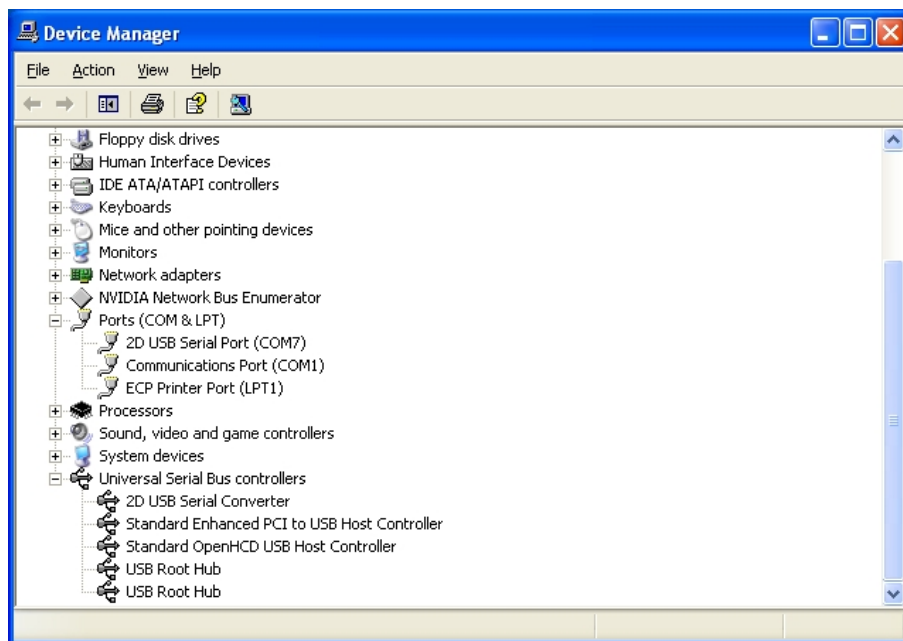
#### 1.1.1 Enter the device manager under Window 98SE systems

- Right mouse click at My Computer
- Choose Properties from the context menu
- Select the rider with the caption Device – Manager
- Examine in the tree the item "Ports COM & LPT". Check if any sub-item with the caption "USB Serial Port" exist.



### 1.1.2 Enter the device manager under Window 2000 & XP systems

- Right mouse click at My Computer
- Choose Properties from the context menu
- Select the rider with the caption Hardware. Click at the button with the caption Device – Manager
- Examine in the tree the item "Ports COM & LPT". Check if any sub-item with the caption "USB Serial Port" exist.



In the figure above you can recognize previously installed 2D USB drivers at COM Port 7. In this example we recommend to deinstall the drivers first. Afterwards you should install the new 2D USB drivers. You find detailed informations how to deinstall the 2D USB drivers correctly in chapter 2 of this manual.



Take notice of: You can't influence the allocation of the COM port number. These will be assigned automatically from the operating system !



**Important:** If you install the complete 2D software package by selection the button <Race> (from 2D CD start window) you can ignore the following steps. Then the USB driver installation is unnecessary because this is part of the complete 2D software installation. The driver installation is finished if the user is connecting 2D hardware for the first time with an USB cable. He must uniquely confirm some dialogs.



Do you have no entry for a 2D USB driver (in the device manager window / refer the previous page), you can directly start with the USB driver installation. Take notice of: All figures in the several examples can differ from the appearance at your system. It depends of the current operating system. To start with the driver installation following the next explanations step by step:



**Preparation:**  
Unplug the 2D USB cable (=if connected) from the USB ports of your computer !

**Step1:**

First of all insert the 2D CD in your CR-ROM drive. The CD should start automatically . If the CD does not start automatically, start the program "D:\AUTORUN.EXE" manually. (Given D:\ is the drive letter of your CD-ROM drive. Choose your CD-ROM drive by first double clicking the icon "My Computer" on the desktop, then the program "AUTORUN.EXE". Choose the button <Enter> below "Homepage (offline)"

**Step2:**

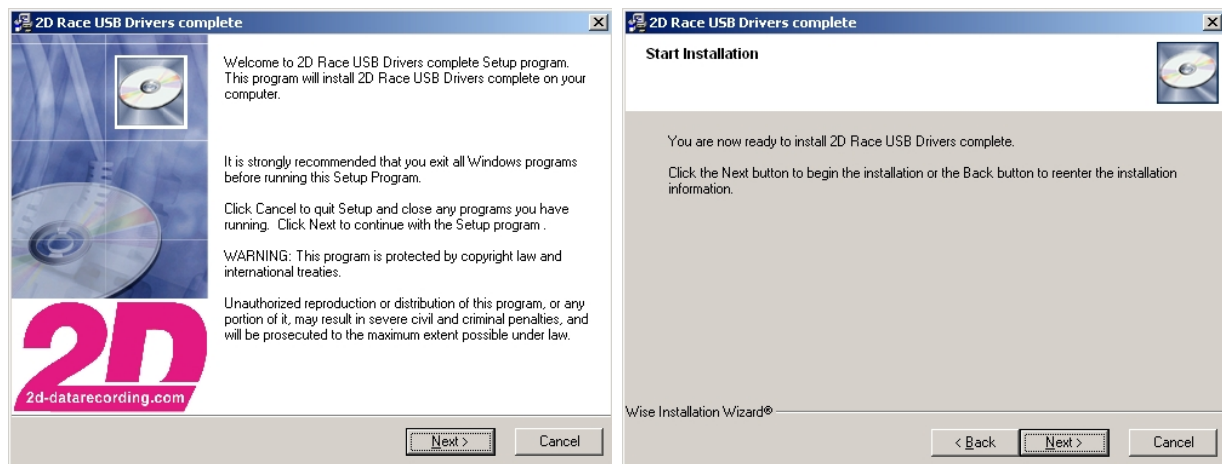
The front-end of the 2D CD-ROM appears. At the left side you will get some main buttons (refer the figure below)



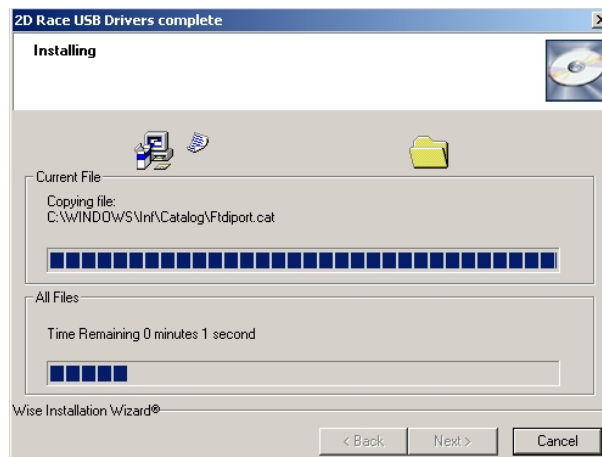
Select the button <Support><Download>.

**Step3:**

Take a look for "2D USB drivers". Choose the link beside of "Installation (Version 2162.906)" named with "Setup file size...". Afterwards a Setup Wizard will be started. He will help you to install the USB drivers correctly.

**Step4:**

Confirm always with button <Next> until the following window appears. The Installation will be start.

**Step5:**

Afterwards connect 2D hardware which requires USB drivers (=refer chapter 3.1 for details)

After connecting the 2D hardware your System detects the new hardware and you must uniquely confirm some dialogs to final the USB driver installation.

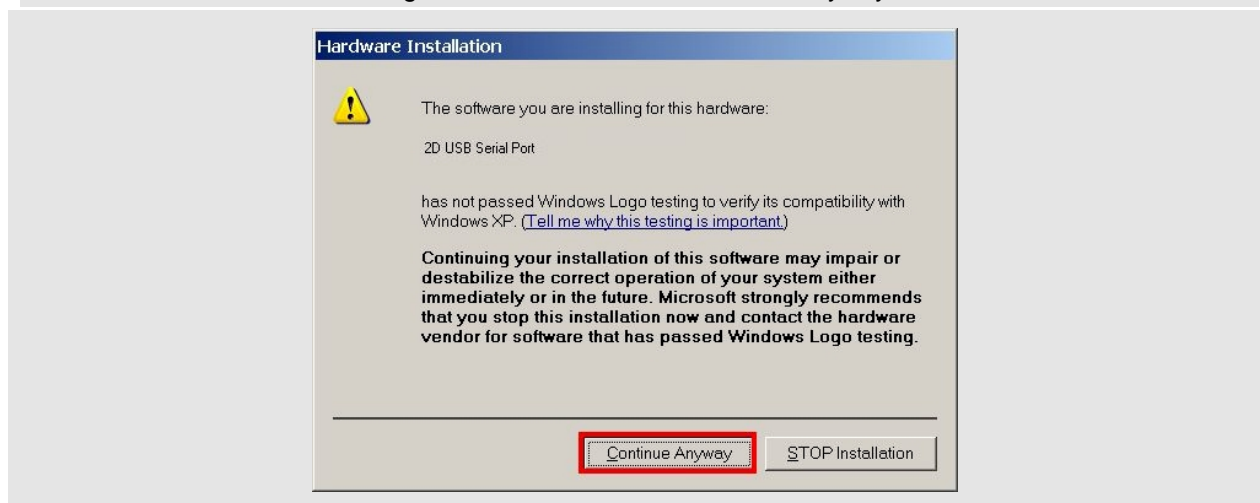


**Step5.1:**

This step is only for Windows XP systems relevant ! If you use Windows2000 or Windows98SE you can ignore this step !



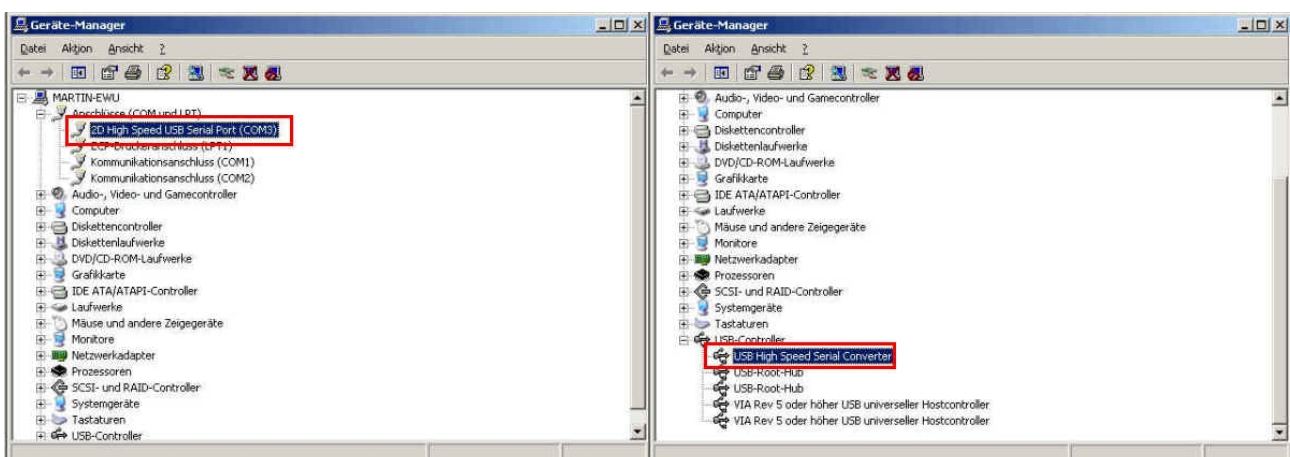
Take notice of: The operating system Windows XP take a compatibility check of the selected USB drivers. You will get always the following message. This compatibility test will not be passed ! Ignore this message and continue the driver installation with the button <continue installation>. In the filgure below named as <Continue Anyway>



**Step6:**

Check the corresponding entries in the [Device Manager window](#) refer [chapter1.1.1](#) and [chapter1.1.2](#)

- At the tree node Ports (COM & LPT) you should find the item **2D High Speed USB Serial Port (COM x)**
- At the tree node USB Controller you should find the item **USB High Speed Serial Converter**





## 2. 2D USB Driver update

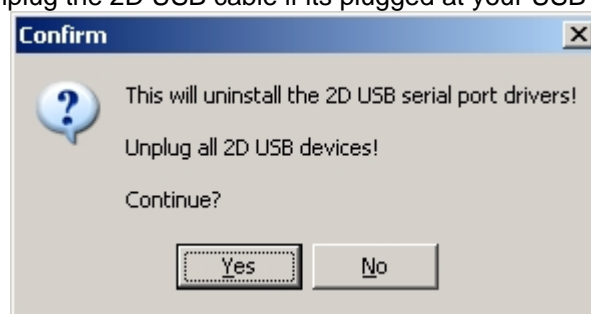
### 2.1 How can I remove the current 2D USB drivers via 2D CD-ROM ?

Before you can start with the USB driver installation you must remove the old drivers from your system. The easiest and quickest way to remove all drivers in one step is to start a "special program". For this you must select a link onto the 2D CD-ROM. To do so following the next instructions step by step:

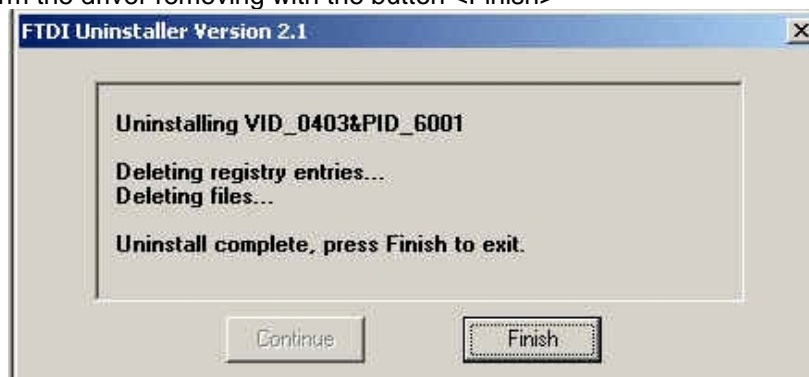
- First of all insert the 2D CD in your CR-ROM drive.
- After the language selection you will see the start window of our CD-ROM.



- Select the button with the caption <Support><Download>
- Choose one of two possible links:
  1. "Removing USB drivers (=FTDI)"
  2. "Removing USB drivers (=SLABS)"Your selection depends on the used 2D hardware (=refer the table at the end of this document)
- Afterwards you will get the following information window. Before confirm this window with the button <Continue> unplug the 2D USB cable if its plugged at your USB port !



- Finally confirm the driver removing with the button <Finish>





## 2.2 How can I update the USB drivers manually via the device manager ?

### Step 1: Open the device manager

#### Windows XP and Windows 2000:



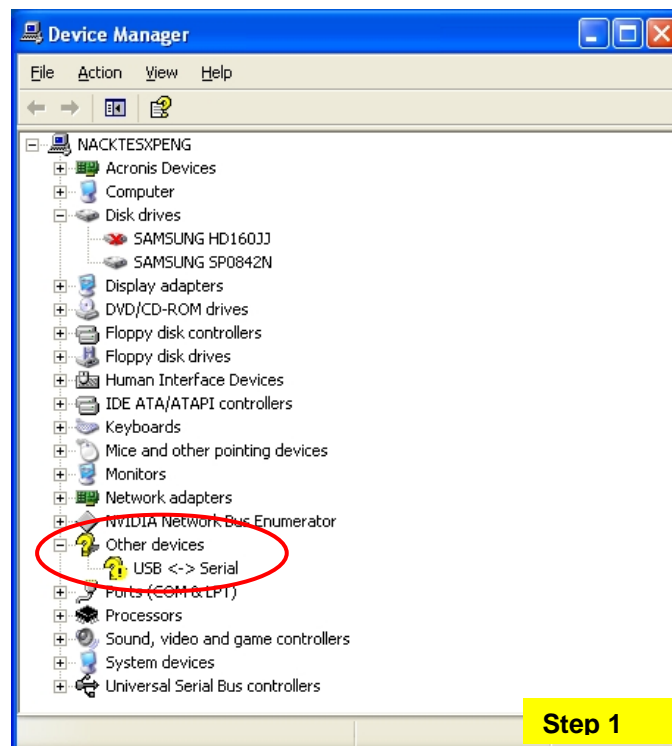
- Right mouse click at <My Computer> (=icon at your desktop)
- Choose <Properties> from the context menu
- Select the rider with the caption <Hardware>
- Click at the button with the caption <Device Manager>

#### Windows 98SE:

- Right mouse click at <My Computer>
- Choose <Properties> from the context menu
- Select the rider with the caption <Device Manager>



During the software installation the 2D USB driver files are copied into the windows system directory. For this the user must be announced on the respective PC with "administrator rights". An absence of these rights can lead to an incomplete installation of these files. An exclamation mark in the "device manager" points then on an incomplete installation. In this case you can update 2D USB driver files manually. Follow for this the following guidance step by step.



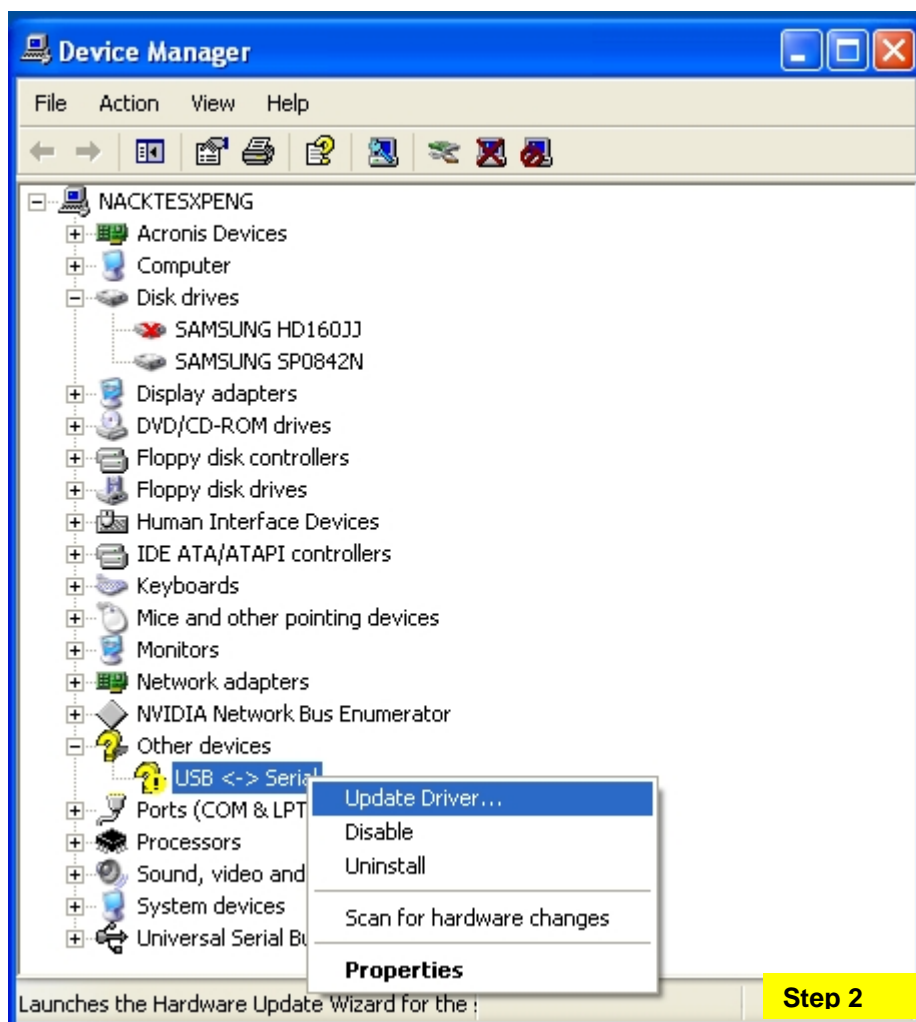
## Step 2: Starting the manual USB driver actualization

Pre-condition: A logger or a memory add-on module was attached to the USB interface !

Preparation: Insert first of all the 2D CD into your CD-ROM drive



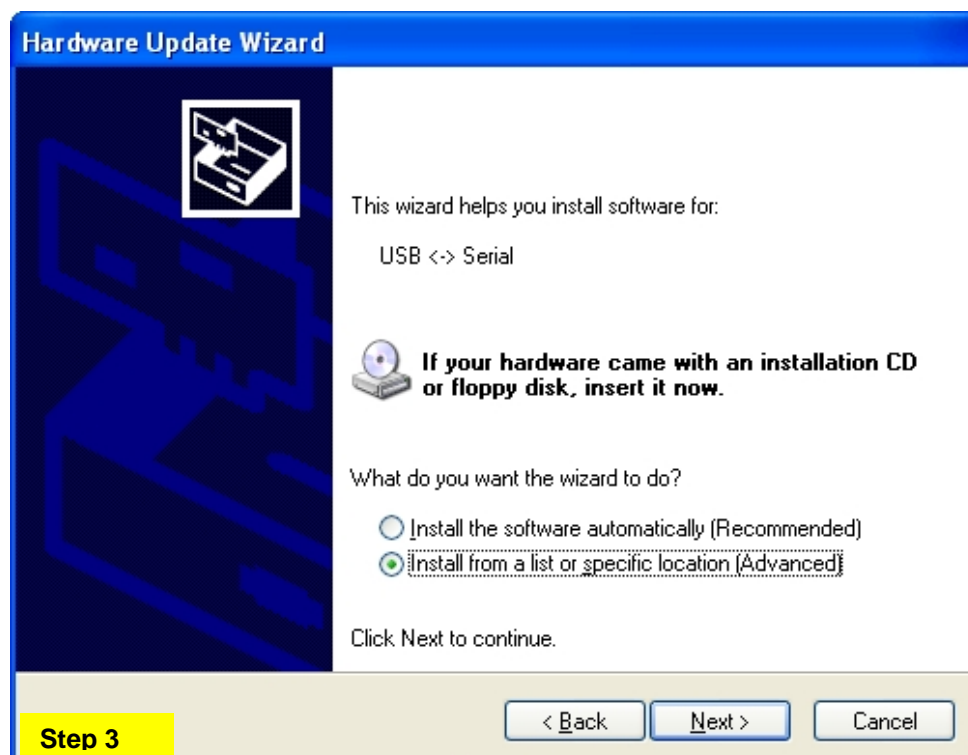
- Select the corresponding USB port (= the port with a exclamation mark)
  - Select afterwards over the context menu (= right mouse click) the entry: <driver update >
  - The actualization of the drivers always run in two steps.
1. Update the USB driver for the **<USB Serial Port>** (entry "Ports (COM & LPT)" in the device manager)
  2. Update the USB driver for the **<USB Serial Converter>** (entry "Universal Serial Bus controllers" in the device manager)



**Step 3: Configure the "Hardware assistant"**

The "Found New Hardware Wizard" will be helpful during the installation

- Take the presetting "No, not this time" and confirm this step with button **<Next>**
- Select afterwards the option **<Select from a list or specific location (Advanced)>** and finalize this step with the button **<Next>**



**Step 4: Assign the directory of the 2D USB driver files**

2D modules which communicate via USB uses different chip sets and needs therefore different USB drivers. These are on the 2D CD-ROM accordingly in different directories. All 2D USB drivers are located on the CD-ROM into following main directory:

à **D:\Drivers** (Presupposed D:\ is the drive letter of your CD-ROM drive)

In this directory are different sub-directories (according to the different 2D hardware)



- **..\FTDI**  
LG-CANMEM1Cxx/128-000 (=memory module)  
LG-CANMEMxCyyy/zzz-000 (=memory module)  
LG-CANMEMxxyyyzzzz-000 (=memory module)  
WC-COM01USB-000 (USB highspeed COM cable)
- **..\SLABS**  
WC-COM02USB-000 (=USB COM cable 230Kbaud)  
LG-KIT\_μC05-000 (=Kit Logger)
- **..\ATM**  
= GPS memory modules
- Select the appropriate directory over the button **<Browse>**. In the example shown down the USB drivers of a memory add-on kit are updated.
- Confirm your selection over the button **<Next>**

**Hardware Update Wizard**

Please choose your search and installation options.

☒ Search for the best driver in these locations.

Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.

☐ Search removable media (floppy, CD-ROM...)

☒ Include this location in the search:

D:\Drivers\FTDI

☐ Don't search. I will choose the driver to install.

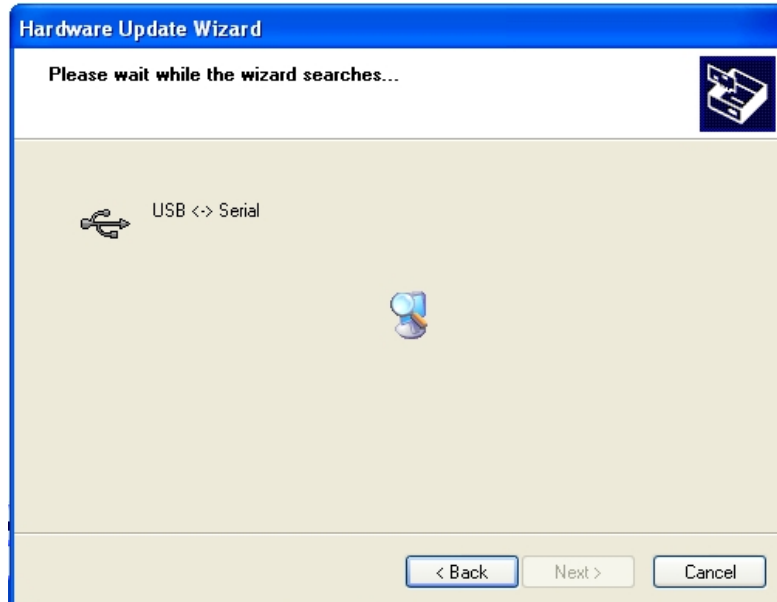
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.

**Step 4**

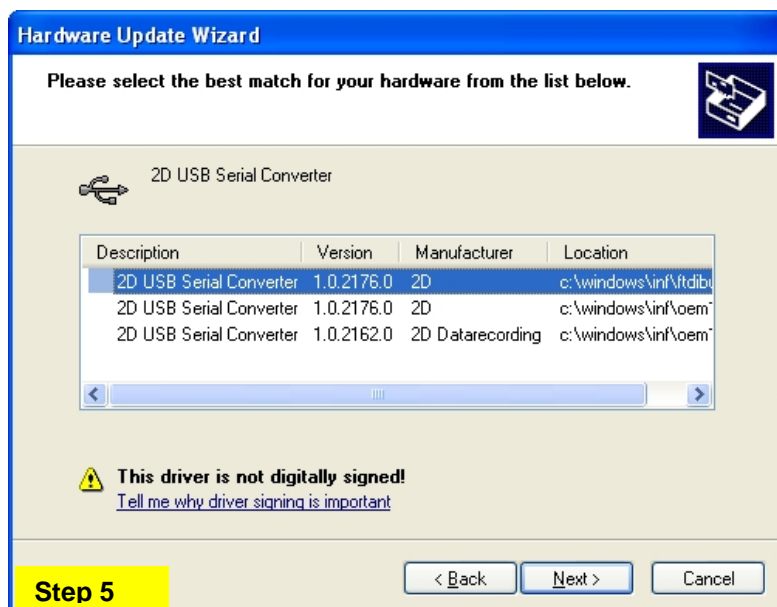
## Step 5: Selecting the USB driver



The hardware assistant looks for suitable driver files. Subsequently, these are offered in a selection list (see second figure below).



**Attention:** In the selection list several entries are indicated, if the 2D software were installed before. Select always the assigned driver file from Step 4 ! (= USB driver from the 2D CD-ROM)

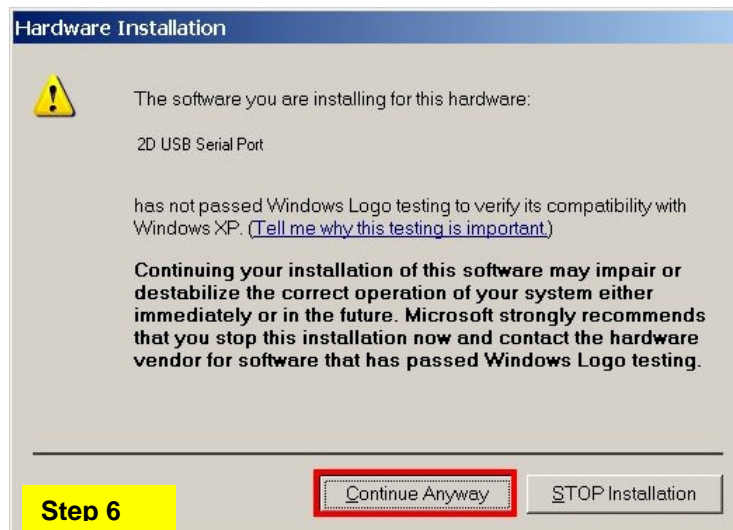


## Step 6: Windows XP compatibility test

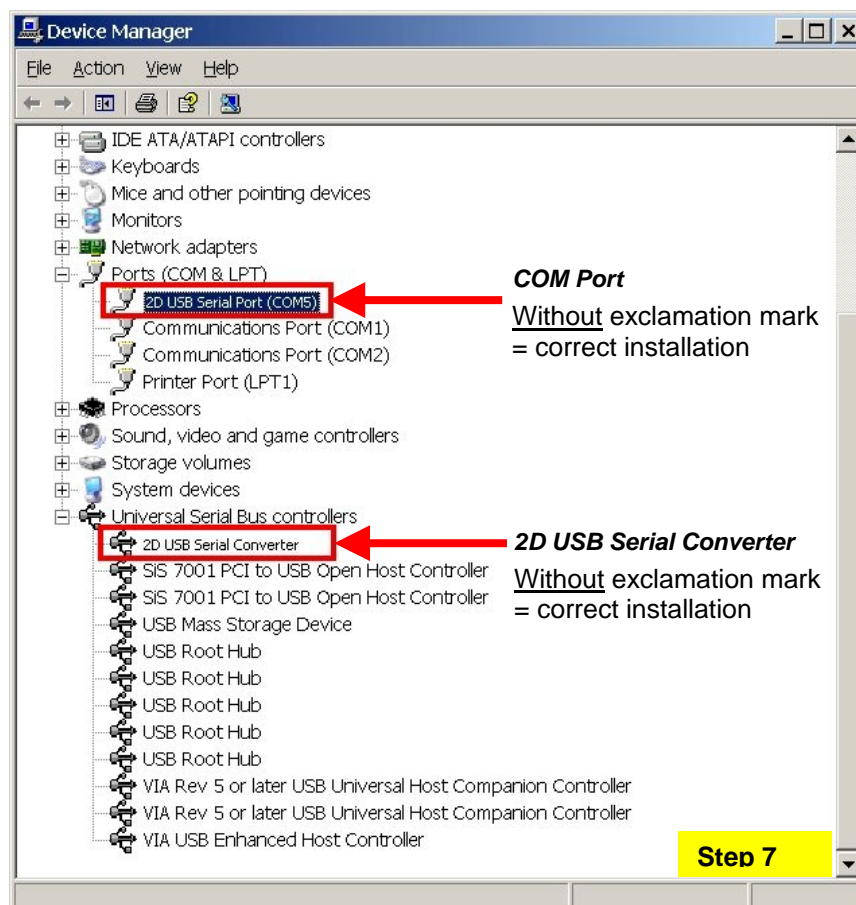


This step is only relevant if you use the operating system Windows XP !  
Under Windows98SE or Windows2000 step 6 is void – Continue in this case directly with step 7 !

- Confirm the compatibility test always via the Button **<Continue Anyway>**



## Step 7: Examination of the correct USB driver installation in the "device manager"

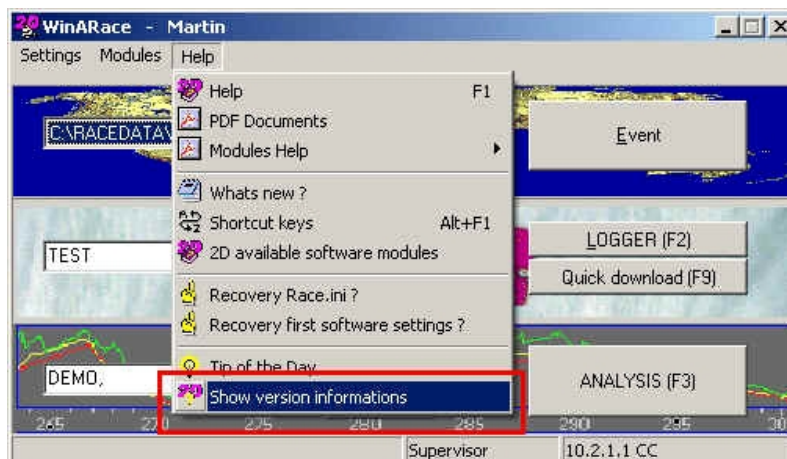




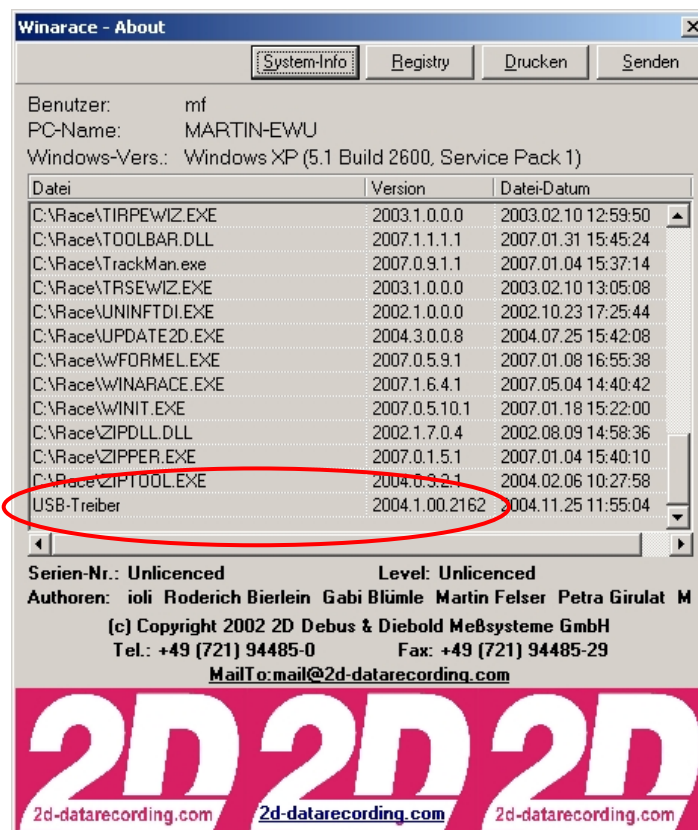
### 3. Where can I get version informations of the current installed USB drivers ?

The supplier of the USB-drivers updates these drivers in regular time intervals. Therefore it is recommended to update your USB-drivers regularly. Before this is done, you should make sure that a USB-driver installation is necessary on your computer. You can locate the current USB-driver version on your computer very easily:

- First of all start our front-end tool WinaRace
- Open the main menu entry Help / show version informations



- You will get version informations of all 2D software modules and additionally from the installed 2D USB drivers. refer the figure below.





### 3.1 Where is the 2D USB driver location on the 2D CD ROM ?



On the 2D CD-ROM exist 3 sub-directories for the 2D USB drivers. The selection depends on the used 2D hardware. The following table should help to find out for which 2D hardware which USB driver is to be used

Directory on CD?	Suitable for which 2D hardware ?
E:\DRIVERS\ATM*	GPS memory modules with "ATM chipset" (=complete list ASAP)
E:\DRIVERS\FTDI*	<ul style="list-style-type: none"> <li>LG-CANMEM1Cxx/128-000 (=memory module)</li> <li>LG-CANMEMxCyyy/zzz-000 (=memory module)</li> <li>LG-CANMEMxxyyyzzzz-000 (=memory module)</li> <li>WC-COM01USB-000 (=download cable)</li> </ul>
E:\DRIVERS\Slabs*	<ul style="list-style-type: none"> <li>WC-COM02USB-000 (=download cable)</li> <li>LG-KIT_μC05-000 (=Kit Logger)</li> </ul>

\* Given E:\ is the drive letter of your CD-ROM drive

#### 3.1.1 Which 2D hardware requires USB drivers ?

##### Sub-directory

##### ..\ATM



LG-GPSMEM-000

##### ..\FTDI



LG-CANMEM1Cxx/128-000



LG-CANMEMxCyyy/zzz-000



LG-CANMEMxxyyyzzzz-000



WC-COM01USB-000

##### ..\Slabs



LG-KIT\_μC05-000



WC-COM01USB-000