

Installing and Using USB Programming Cables

- EASY-USB-CAB
- EASY800-USB-CAB
- EU4A-RJ45-USB-CAB1



Powering Business Worldwide

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1 Overview

1.1 Equipment supplied

USB programming cables are delivered together with a mini CD. This mini CD contains the corresponding installation wizard and USB drivers, as well as these application notes.

You can also download the wizard with the drivers and these applications notes at our Download Center. To do so, click on the following link to visit the "easy Software Download Center":

www.eaton.com/moeller → **Support** → **easy Software Downloadcenter**

1.2 Use

USB programming cables can be used to establish a serial communication connection to the following easy and XC devices using a computer programming software program:

USB programming cables	Devices
EASY-USB-CAB	easy500 / easy700
EASY800-USB-CAB	easy800 / MFD-CPx... / EC4P... / ES4P...
EU4A-RJ45-USB-CAB1	easy80x-DC-SWD / XC100 / XC200 / EC4P...

The programming software uses a virtual COM port to establish a connection. This virtual COM port is created in Windows when the USB drivers are installed and will be listed in the Windows Device Manager under "Ports (COM & LPT)" as soon as the programming cable is plugged into a USB port and the device driver is fully installed.

Further information on using the USB programming cables is provided in chapter "Creating a communication connection", page 9.

1.3 Operating system preconditions

USB programming cables can be used with the following operating systems:

- Windows 2000 SP4
- Windows XP SP2
- Windows Vista (32bit/64bit)
- Windows 7 (32bit/64bit)
- Windows 8 (32bit/64bit)

Before using the cables, you will have to install the matching USB driver software, or USB drivers for short. Please note that there is a separate driver version for Windows 2000.

2 Installation



Make sure to follow the installation steps in the right order!

Before you can start using your USB programming cables, you will have to run the USB driver installation routine on your computer/laptop.

The USB drivers are basically installed in two steps:

1. Pre-installation of the USB drivers on your PC/laptop
2. Windows installation **the first time** a USB programming cable is plugged in

The USB drivers have to be pre-installed once on the computer/laptop for each of the USB programming cables listed below:

- EASY-USB-CAB
- EASY800-USB-CAB
- EU4A-RJ45-USB-CAB1

The Windows installation will take place the first time a programming cable is connected to the computer/laptop. This will be done once for each programming cable.

2.1 Starting the installation wizard

The installation wizard is used to pre-install the drivers and to undo the installation if necessary. When you insert the mini CD into your computer's/laptop's drive, an installation wizard that can be used to start the USB driver installation routine will be opened. Alternatively, you can run the "Install.exe" file found on the CD.

If you want to install the installation wizard with the latest version of the USB drivers on your computer/laptop, follow the steps below:

- ▶ Go to the "easy Software Download Center" at www.eaton.com/moeller → **Support** → "Downloads" and check whether a new USB driver version is available.
- ▶ Download the new USB driver installation files to your computer and unzip the ZIP file to a folder of your choice.
- ▶ Double-click on the "Install.exe" file.

The installation wizard starts up.

2.2 Pre-installation

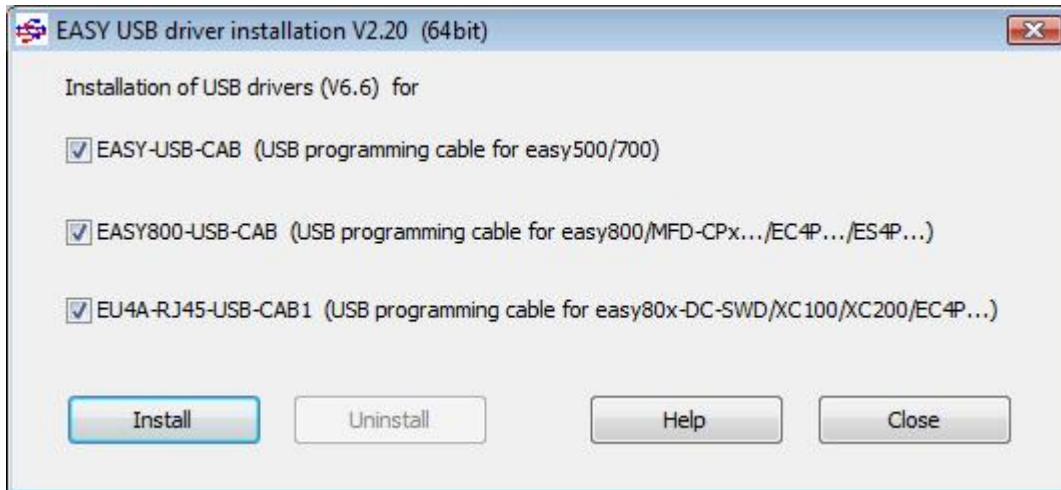
The pre-installation routine will install all necessary drivers on your computer/laptop. If a USB programming cable is plugged into the computer/laptop afterwards, Windows will be able to automatically install the corresponding USB drivers and add the new device to the system configuration.



Please note that you will need admin rights in order to be able to install the USB drivers!

In order to run the pre-installation routine, follow the steps below:

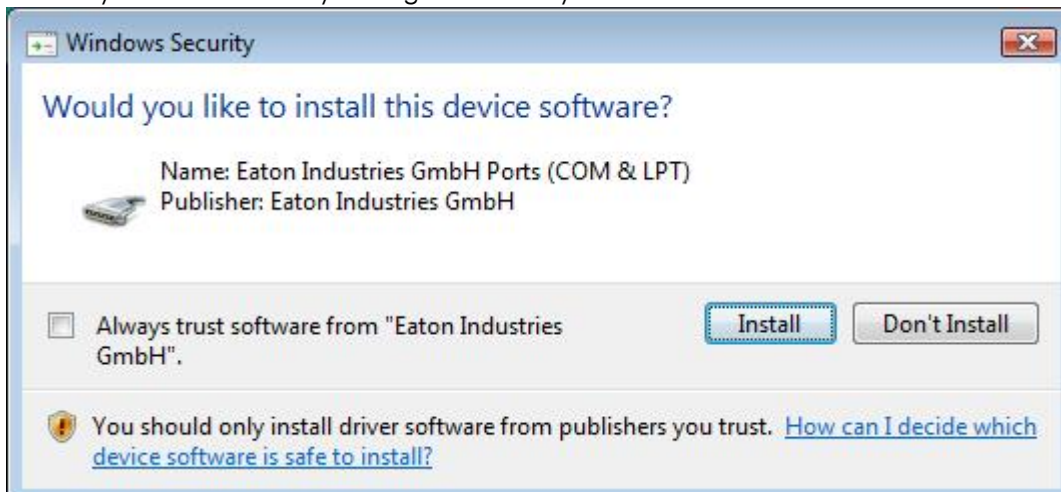
- ▶ Log in as an administrator or contact your system administrator so that they can assign you the necessary permissions.
- ▶ Start the installation wizard.
- ▶ Once the installation wizard opens, click on the "USB driver installation" button.
- ▶ Click on the "USBDriverInst" button. If you have a 64-bit operating system, click on the "USBDriverInst x64" button instead.
- ▶ Select one or more USB programming cables by clicking on the corresponding check boxes.



- ▶ Start the pre-installation routine by clicking on the "Install" button.

After you do this, a series of confirmation prompts may appear depending on your operating system.

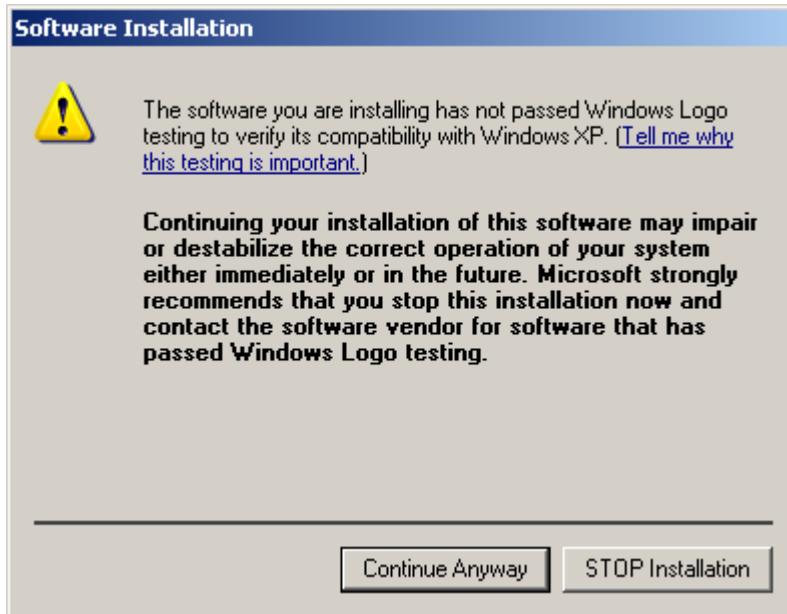
If you are running Windows Vista or higher, the following confirmation prompt will be shown before you can make any changes to the system:



- ▶ To run the USB driver installation routine, simply click on "Install."

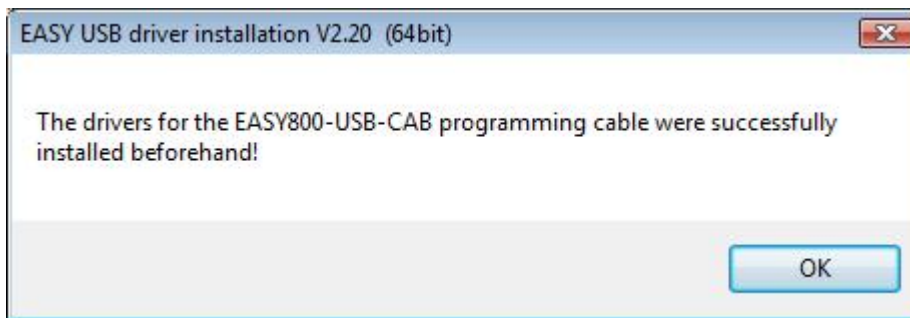
If you are running Windows XP, the following confirmation prompt will appear to warn you about installing drivers that have not passed Windows Logo testing. This warning prompt appears when drivers do not include a WHQL certification file, for example.

Please note that the USB driver installation package does feature a valid software publisher certificate and has been tested on all the operating systems listed in section 1.3.



- To run the USB driver installation routine, simply click on "Continue Anyway".

Regardless of the operating system you are using and the programming cable you are installing, the following message will appear, if the installation is successful:



- Confirm by clicking on "OK."
- Exit the "EASY USB driver installation" dialog box by clicking on the "Close" button.

The drivers for the USB programming cables are now pre-installed.

2.3 Windows Installation

When you plug in a programming cable for the first time, Windows will detect that a new device has been connected and will automatically start its device recognition mechanism, e.g., the "Found New Hardware Wizard" in XP; see the figure on page **Fehler! Textmarke nicht definiert.**

At this point, Windows will check the USB devices to see whether the combination between the manufacturer ID and the individual product ID is already found in the Windows Registry.

If it is not, Windows will search for a matching device driver on the system.

If a pre-installed driver is found on the system, Windows will be able to install it automatically.

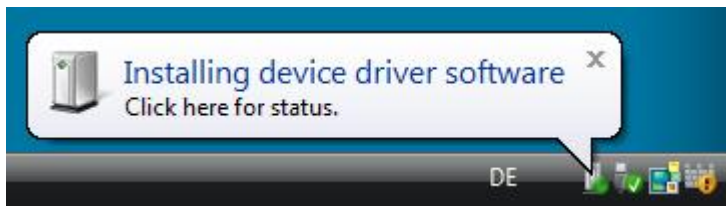
When this is done, the new device is added to the system configuration and a virtual COM port is created.

Please note that you will not be able to use the device until Windows has successfully completed the installation.

2.3.1 Installing on Windows 2000, Windows Vista, Windows 7, Windows 8

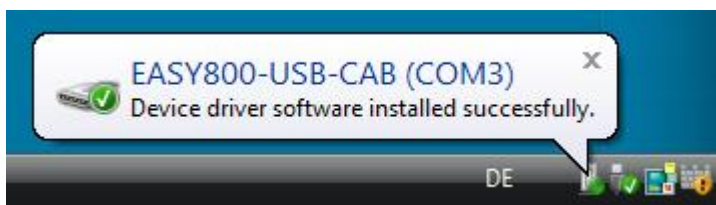
In these operating systems, the USB drivers will be automatically installed after you plug in the USB programming cable. If you have already pre-installed the USB drivers, you will not have to take any action at this point.

Windows will show a message in the taskbar while installing device driver software.



At this point, the USB programming cable will be added as a new device to the system configuration and a new virtual COM port will be created.

If the device driver software is installed successfully, a message will indicate that your device is ready to use. This message will also show the COM port number that has been assigned to the USB programming cable. Once you receive this message, you can proceed to establish a communication connection using this COM port.



2.3.2 Installing on Windows XP

The "Found New Hardware Wizard" will appear the first time a USB programming cable is plugged into a Windows XP system. This wizard will require you to make a few choices.

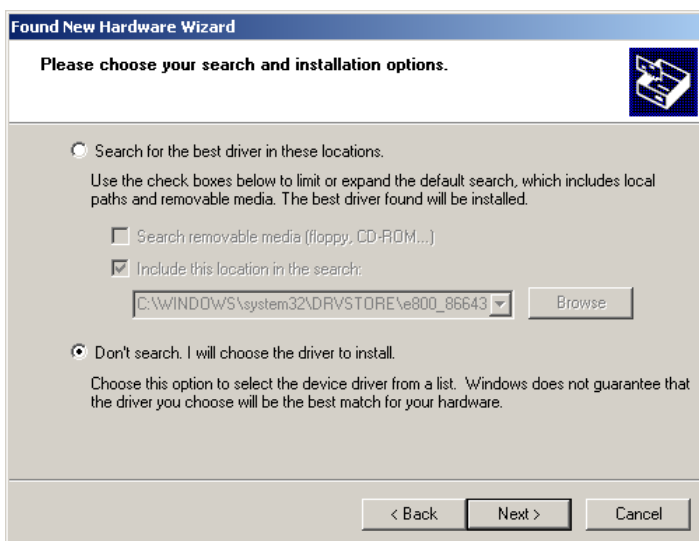


- Choose here "No, not this time" and click "Next".

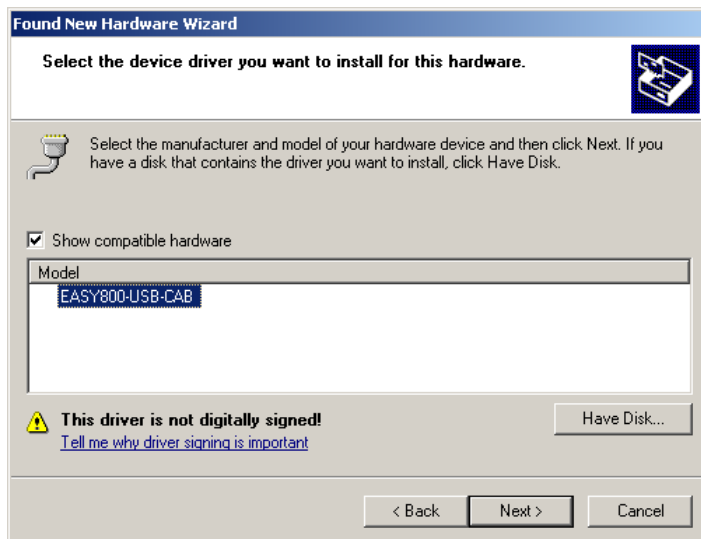


- Choose here "Install from a list or specific location" and click "Next".

You can also select the "Install the software automatically" option. If you do so, the wizard will skip the next two steps. In this case, the system will automatically look for the right driver and install it once it finds it. Please note, however, that this automatic driver search may take a while.



- Choose here "Don't search. I will choose the driver to install" and click "Next".

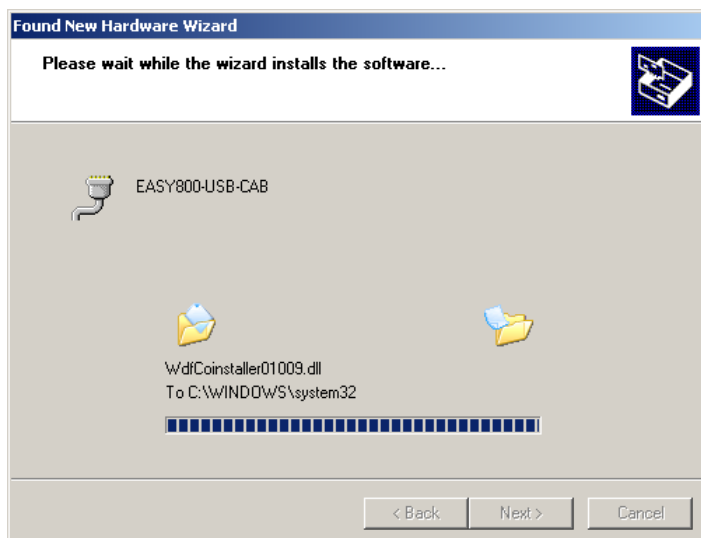


The setting "Show compatible hardware" causes the pre-installed USB driver for the programming cable to be displayed.

- Select the displayed driver and then click "Next".

Depending on the setting on your PC/laptop a Windows confirmation prompt will appear if there is no valid WHQL driver signing (see section Pre-installation).

- Acknowledge this message with "Continue Anyway".



The driver is now installed under Windows.




The installation will be complete when you click on the "Finish" button in the "Completing the Found New Hardware Wizard" dialog box.

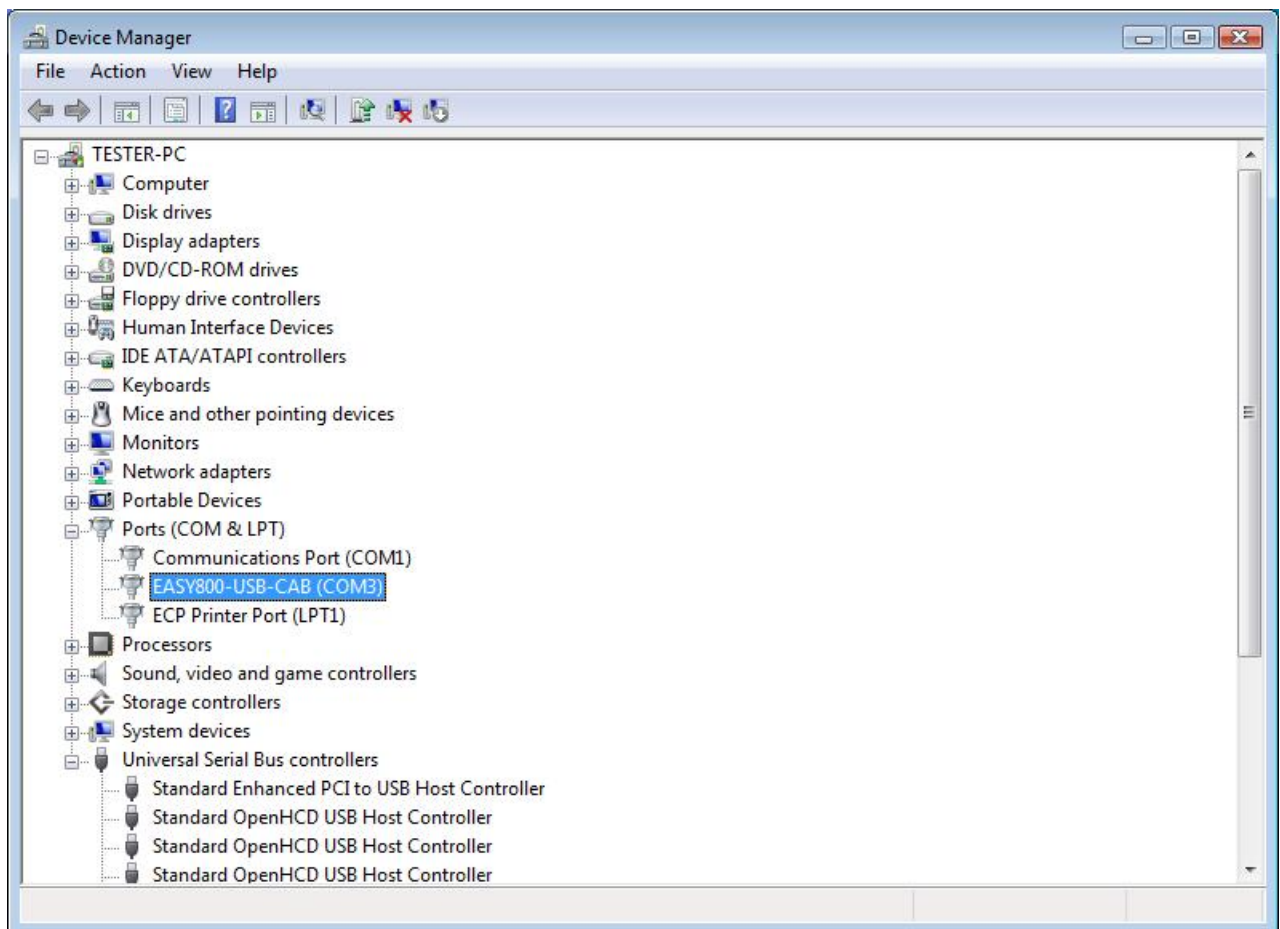
If the installation is completed successfully after the "Completing the Found New Hardware Wizard" dialog box is closed, there will be a new virtual COM port. If this is the case, you can now proceed to use your USB programming cable.

3 Creating a communication connection

During the USB driver installation routine, Windows will create a virtual communication port (COM port) for each USB programming cable, assigning the next free port number (starting with COM3) by default.

If the USB programming cable is connected to the computer, the Device Manager will show a new entry with the name of the USB programming cable and the assigned COM port number under "Ports (COM & LPT)".

- To open the Device Manager, use the Windows key  + Pause/Break key shortcut and then click on Device Manager.



If you unplug the USB programming cable from the computer, the COM port number will disappear from the list of ports in the Device Manager. Once this happens, you will not be able to use the assigned COM port anymore.

If you plug the programming cable back into the computer, the assigned communication port will be restored with the exact same COM port number.

Please refer to the "What do you do if..." chapter for troubleshooting tips. This section also explains how to change a COM port number after it has been assigned.

3.1 Maximum Supported Baud Rates

The maximum baud rate that can be used will depend on both the USB programming cable and the device being used.

The baud rate setting ranges in the software will be based on the device. Once the device is switched on, a default baud rate will be set. If a different baud rate is set with the software, the software will check, whether the baud rate is supported by both the device and the programming cable, while attempting to establish communications. If the baud rate is supported, the software will establish a communication connection with this baud rate. If it is not supported, the communication connection will be established with the next lowest baud rate that is supported by both the device and the programming cable.

The following table shows the maximum baud rate settings that can be used depending on the USB programming cable and the device that are being used.

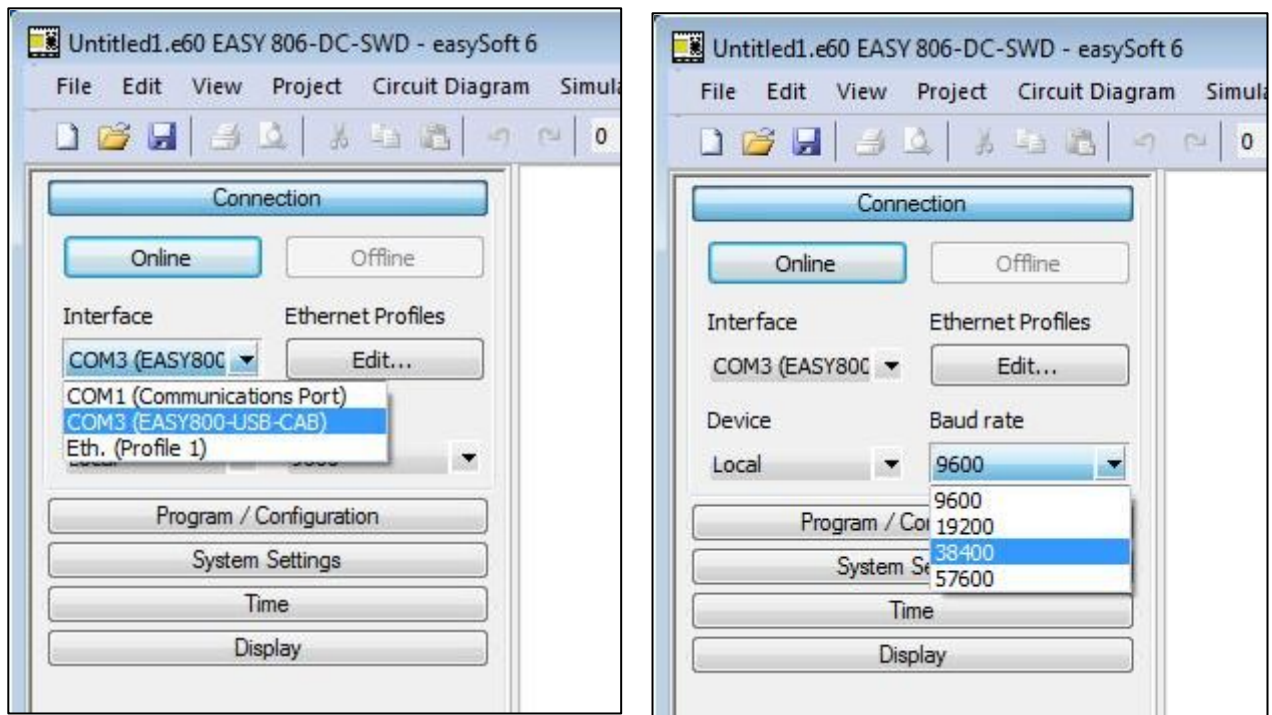
Device	USB programming cables	Baud rate [Bits/s]
easy500/700	EASY-USB-CAB	up to 4800 ⁽¹⁾
easy800/MFD-Titan/ ES4P/EC4P	EASY800-USB-CAB	up to 57600
easy80x-DC-SWD/EC4P/XC100/XC200	EU4A-RJ45-USB-CAB1	to 57600

⁽¹⁾ This baud rate is set as the default setting for easy500/700 devices in the easySoft programming and communication software program. Higher baud rates cannot be selected.

3.2 Communication via easySoft with easy Relay, MFD-Titan

To establish a communication connection to an easy device using the **easySoft (Pro/Basic)** programming and communication software program, follow the steps below:

- ▶ Make sure that the USB programming cable is plugged in.
- ▶ Start the programming and communication software program.
- ▶ Click on the "Communication" task button in the lower left and then on the "Connection" button.
The Connection dialog box will appear.
- ▶ Open the "Interface" drop-down menu and select the USB programming cable.
The virtual COM port will only show up in the "Interface" drop-down menu if the USB programming cable is connected to the computer. If you plug it in later, you can refresh the list by pressing the <F5> key.
- ▶ Set the baud rate you want to use.
- ▶ Click on the "Online" button to establish a communication connection.



You can set a different baud rate for each COM port connection in the "Connection" menu.

In easySoft Pro/Basic V6.40 and higher, the program will show the designation for the USB programming cable (e.g., "EASY800-USB-CAB") next to the COM port number.

3.3 Communication via easySoft-Safety with easy Safety (ES4P)



The virtual COM port is only available in the interface selection if the USB programming cable is connected to the PC.

To establish a communication connection to an easySafety device using the **easySoft-Safety** programming and communication software program, follow the steps below:

- ▶ Make sure that the USB programming cable is plugged in.
- ▶ Start the programming and communication software program.
- ▶ Click on the "Communication" task button in the lower left and then on the "Connection" button.
The Connection dialog box will appear.
- ▶ Open the "Interface" drop-down menu and select the USB programming cable.
The virtual COM port will only show up in the "Interface" drop-down menu if the USB programming cable is connected to the computer. If you plug it in later, you can refresh the list by pressing the <F5> key.
- ▶ Set the baud rate you want to use.
- ▶ Click on the "Online" button to establish a communication connection.

You can set a different baud rate for each COM port connection in the "Connection" menu.

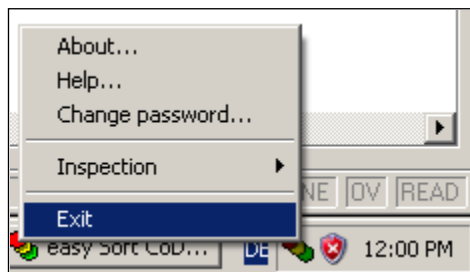
3.4 Communication via XSoft-CoDeSys with easy Control (EC4P)

To establish a communication connection with **XSoft-CoDeSys** V2.3.5 or higher (formerly "easy Soft CoDeSys"), you will first have to create a new serial communication channel by opening the "Online" menu and selecting the "Communication Parameters" menu option.

→ Create a new communication channel after you have plugged in the USB programming cable.

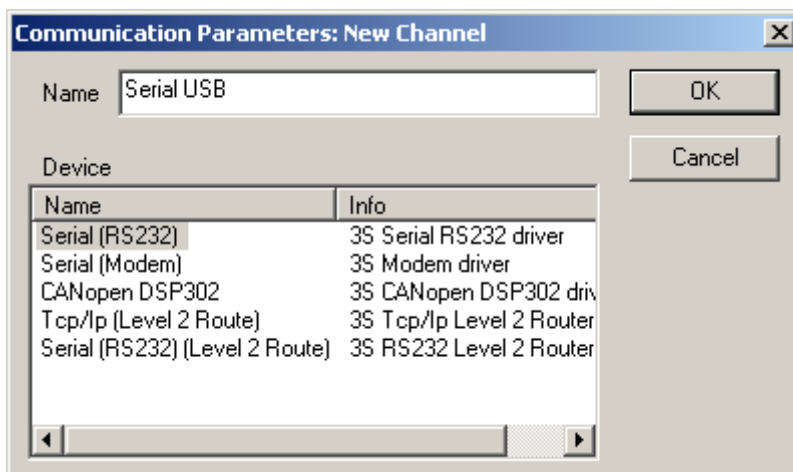
The following procedure must be observed without fail in order to ensure, that commissioning is carried out correctly.

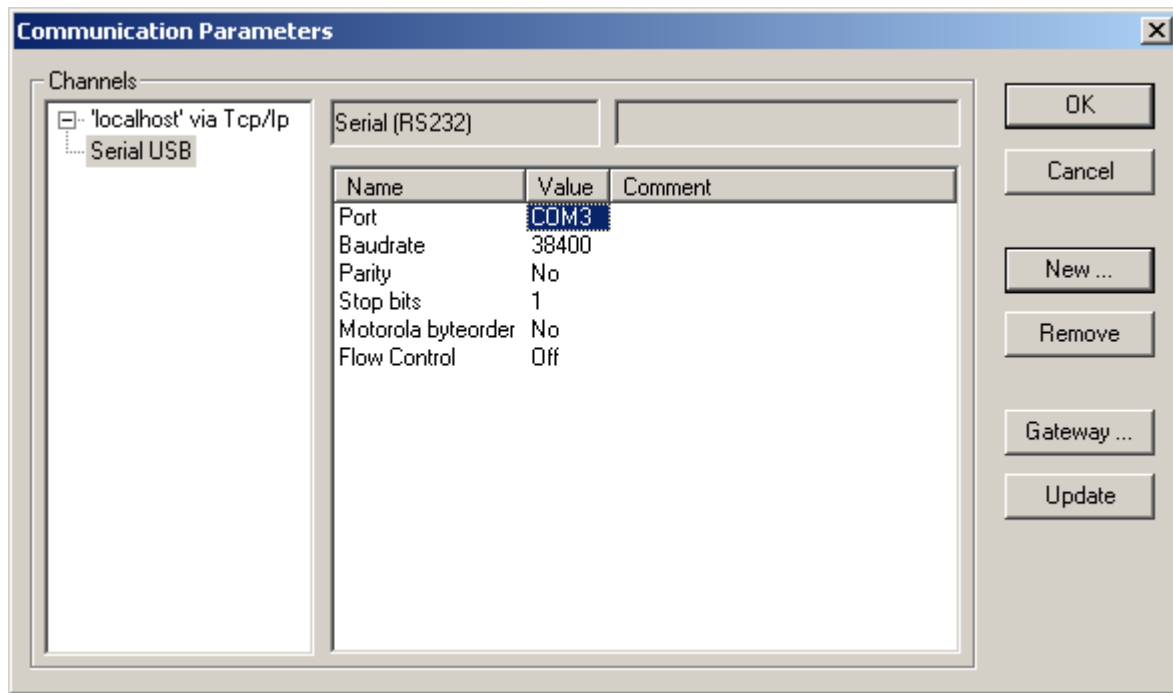
1. Run the entire USB driver installation routine (see the "Installation" chapter).
2. Make sure that the USB programming cable is plugged in.
3. Open the Device Manager to find out what the assigned COM port number is.
4. Close the gateway server if already started



5. Start XSoft-CoDeSys and open the project or create a new one.
6. Create a new communication channel of type "Serial (RS232)" under Communication Parameters.
7. Click on the "Value" column in the "Port" line and double-click on it multiple times to set the COM port number you found.
8. Now click on the "Value" column in the "Baud rate" line and double-click on it multiple times to set the baud rate you want.
Set a value of up to 57,600 bps.
9. Create the communication connection to the device ("Online" menu, "Login" menu option)

→ XSoft-CoDeSys currently supports only COM Ports up to max. COM32.





3.5 Notes on avoiding communication faults

1. Do not unplug the programming cable from the computer, if a communication connection has been established between the device and the computer! If you plug the programming cable back in immediately afterwards, the system may be unable to restore the connection because Windows will not re-enable the virtual COM port. If unplugging and plugging the programming cable again does not fix this problem, you will have to restart Windows.
2. With Windows 2000, it may only be possible to use one type of programming cable at the same time. The standard COM port should also not be adjusted, because in certain circumstances Windows may not be able to reactivate the virtual COM port after the cable is removed and refitted.
3. Interference pulses may cause in certain circumstances the virtual COM Port to log off in Windows. This is due to the susceptibility of the USB interface on typically available PCs/laptops to interference. Removing and refitting the USB programming cable will cause the virtual COM Port to log on again through Windows. The communication connection can then be opened again.

4 Uninstalling

A complete uninstalling is required before a new driver version can be installed.



There is no need to update the driver version, if the communication connection is working flawlessly with the USB programming cables and the drivers that are currently installed!

The drivers are basically uninstalled in two steps:

1. Undoing the Windows installation
2. Undoing the USB driver installation

4.1 Uninstalling driver versions V5.3 and higher step by step

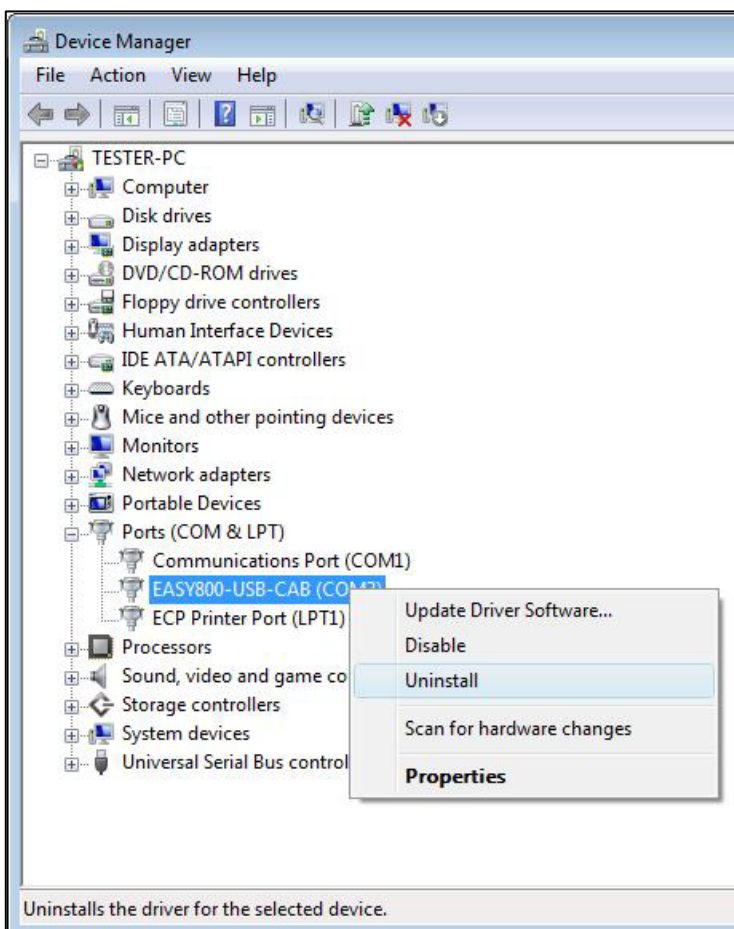
Undoing the Windows installation



If the USB programming cable is not connected to the PC, the virtual COM Port in the Device Manager is not displayed.

To undo the Windows installation, follow the steps below:

- Make sure that the USB programming cable is plugged in.
- Open the Device Manager by following the instructions on page 20.



► Under "Ports (COM & LPT)" find the entry for the virtual COM Port of your USB programming cable.

► Right click the context menu to open it and choose "Uninstall".



- ▶ Look at the "Delete the driver software for this device" check box and make sure that it is not enabled.
- ▶ Confirm the prompt with "OK."

The USB driver is removed from the system configuration of your PC/laptop.

- ▶ Now disconnect the USB programming cable.
- ▶ Repeat the same procedure to uninstall any other USB programming cables that you have used with the computer/laptop.
- ▶ Now go to the "Undoing the USB driver installation" step on page 16.

Undoing the Windows installation without a USB programming cable

If you do not have a programming cable handy, or if the "Uninstall" button in the "EASY USB driver installation" dialog box is grayed out after you have undone the Windows installation, you can follow the steps below:

- ▶ Close the Device Manager if it is open
- ▶ Open the Start menu and enter "cmd" into "Search programs and files."

The list above the input box will show the "cmd.exe" program. Now start the administrator command prompt. The procedure required in order to do this will depend on the operating system you are using.

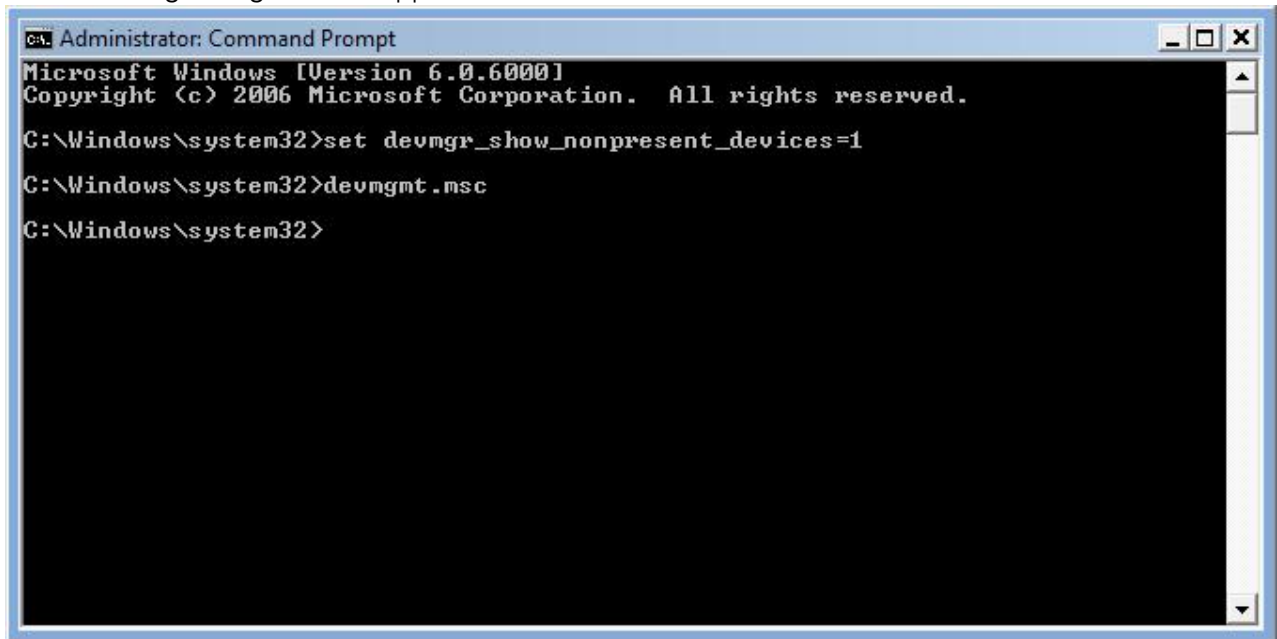
If you are running **Windows Vista or higher**, start the administrator command prompt as follows:

- ▶ Right-click on the "cmd.exe" program that was just found to open the context menu (in Windows Vista and higher).
- ▶ Now left-click on the "Run as administrator" option in the context menu (in Windows Vista and higher).

If you are running a version of **Windows that is lower than Vista**, start the administrator command prompt as follows:

- ▶ Double-click on the "cmd.exe" program that was just found.

The following dialog box will appear.



Now follow the steps below regardless of which operating system you are running:

- ▶ Enter the following line: "set devmgr_show_nonpresent_devices=1" and press the "Return" key.
- ▶ Enter "devmgmt.msc" and press "Return."

The Device Manager will be started.

Open the "View" menu and check whether the "√ Show hidden devices" option is enabled (the option is enabled if there is a check mark next to it).

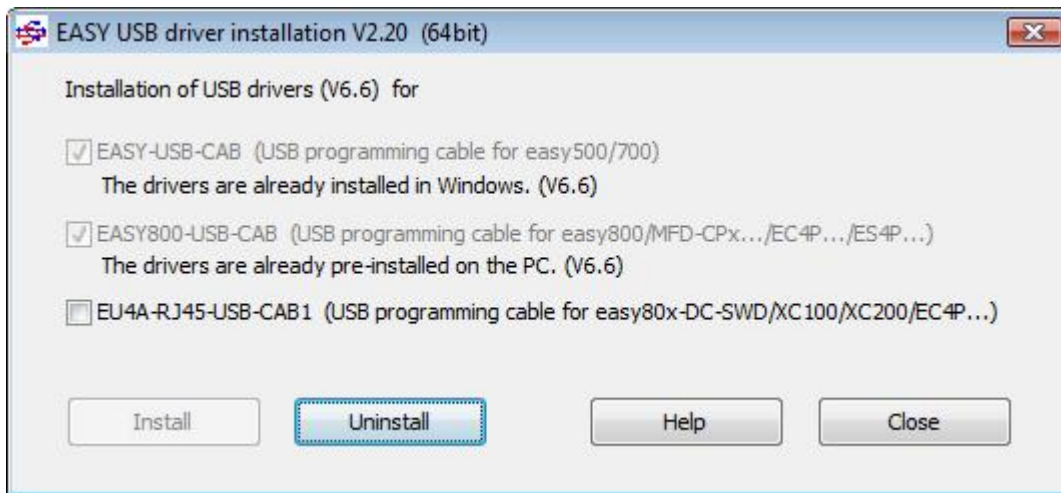
- ▶ Double-click on "Ports (COM & LPT)" or on "Universal Serial Bus controllers." Any devices that are not available/connected will be shown in light gray.
- ▶ Click on the entry for the USB programming cable and right-click on it to open the context menu.
- ▶ Now left-click on the "Uninstall" option.
- ▶ If you have been using several USB programming cables, you will have to uninstall every single driver instance (every single virtual COM port). To do this, simply repeat the last two steps as necessary.

Undoing the USB driver installation

- ▶ If the installation wizard does not start automatically, double-click on the "Install.exe" file on the mini CD.
- ▶ Click on the "USB driver installation" button and then on the "USBDriverInst" button. If you have a 64-bit operating system, click on the "USBDriverInst x64" button instead.

When the program starts, it will check whether a version of the USB driver has already been installed on your computer or laptop. The version and installation status found will be shown.

If the dialog box shows the "The drivers are already installed in Windows" message for a USB programming cable, you will first have to carry out the "Undoing the Windows installation" step on page 14.

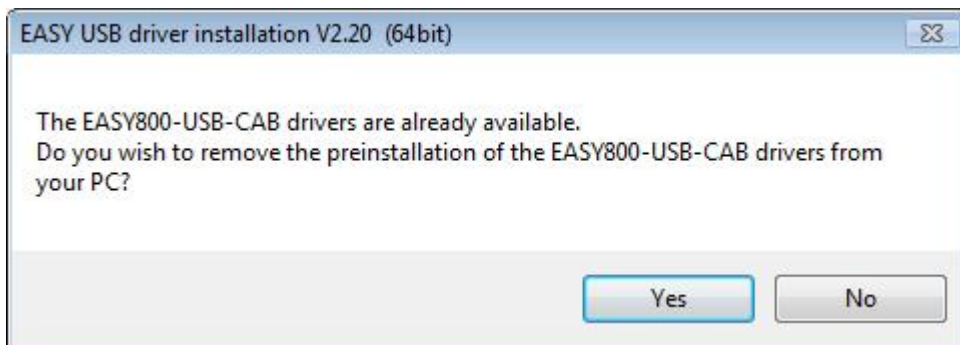


- Start the uninstalling by clicking the "Uninstall" button.

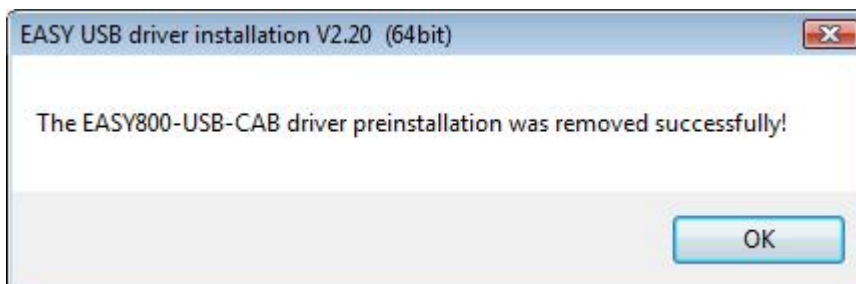


If the "Uninstall" button is grayed out, you will first have to carry out the "Undoing the Windows installation" step on page 14.

The program will uninstall the pre-installed drivers for the listed USB programming cables one after the other. Before the drivers for each programming cable are uninstalled, a confirmation prompt will appear.



- Confirm the prompt by clicking on "Yes".



- Confirm the prompt by clicking on "Yes".
- Close the "EASY USB driver installation" dialog box by clicking on the "Close" button.

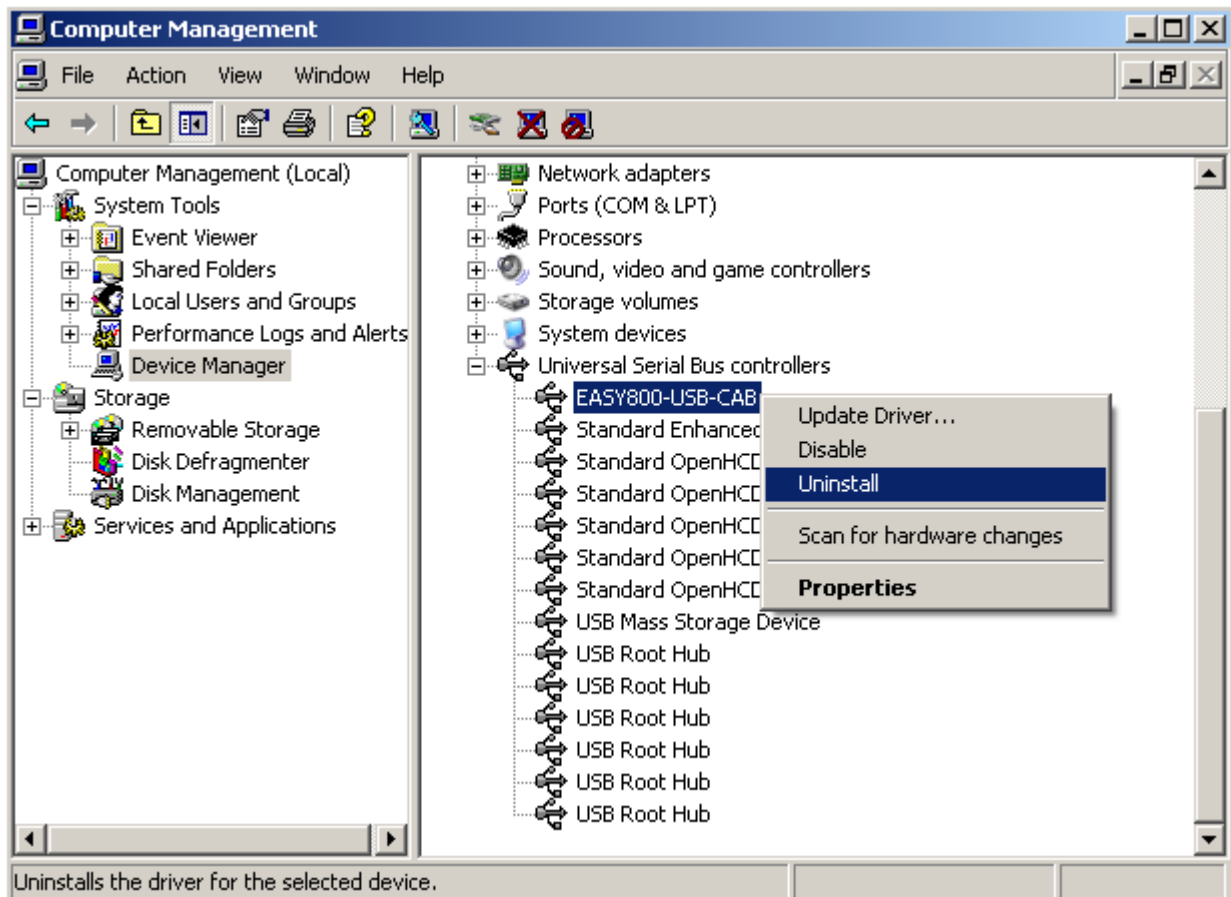
The uninstalling removes all pre-installed driver files from your PC.

4.2 Uninstalling driver version 4.40

If the USB drivers were pre-installed with EASY USB Driver Installation V1.03 and then installed in Windows, the procedure will be similar to that described in the "Uninstalling driver versions V5.3 and higher step by step" chapter.

Undoing the Windows installation

- Find the entry with the name of your USB programming cable in the Device Manager at "Universal Serial Bus controllers". Right click the context menu to open it and choose "Uninstall".



Undoing the USB driver installation

The procedure for uninstalling pre-installed V4.40 drivers is identical to that used for other driver versions.

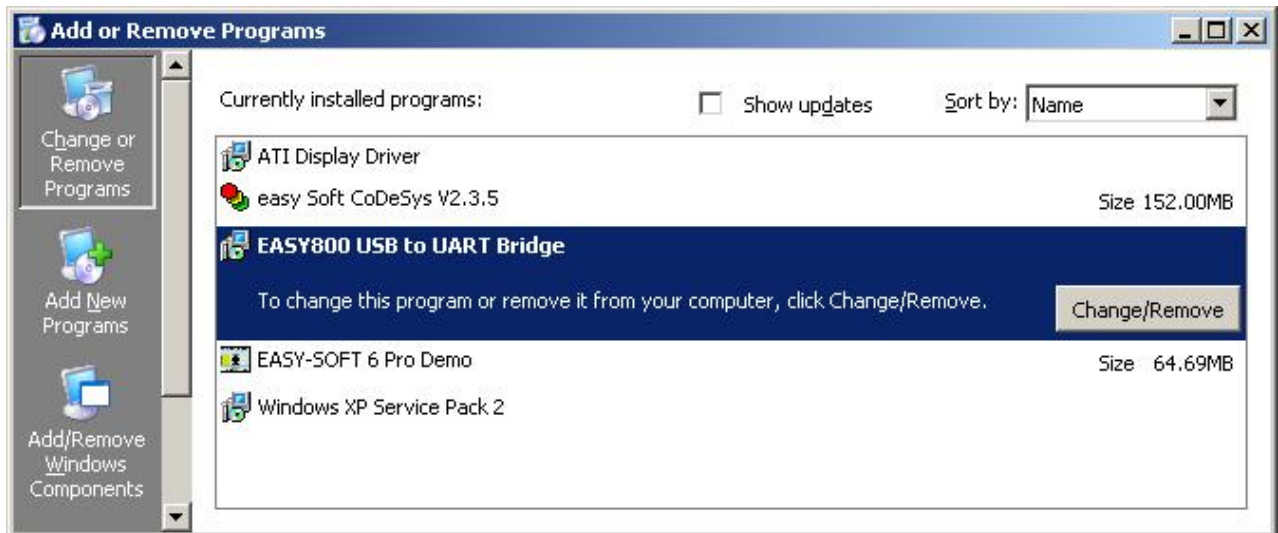
- Start the current "EASY USB Driver Installation" and remove the pre-installed drivers by clicking on the "Uninstall" button.

For additional instructions on how to remove pre-installed USB drivers, please refer to the "Uninstalling driver versions V5.3 and higher step by step" chapter.

4.3 Uninstalling driver version 4.20

The very first version of the USB driver installation routine, "EASY USB Driver Installation V1.00," generated an entry in Control Panel/Programs during the installation routine. This entry can be used to completely uninstall the USB driver.

- ▶ Look for the entry corresponding to the USB programming cable you are using in the list of installed programs (e.g., "EASY800 USB to UART Bridge")
- ▶ Start the Windows uninstalling of the V4.20 USB drivers by clicking the appropriate "Change/Remove" button.



Alternatively, version 4.20 drivers can also be uninstalled as described in the "Uninstalling driver version 4.40" chapter, page 18.





5 What do you do if...

... the USB driver installation routine cannot be successfully completed even after following the procedure described in the "Installation" chapter?

Open the Device Manager

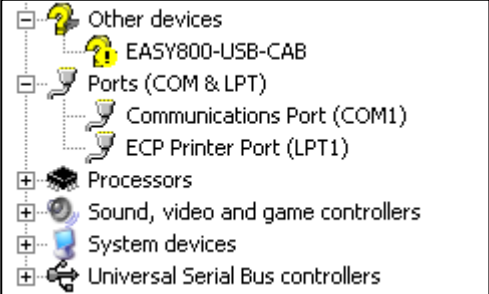
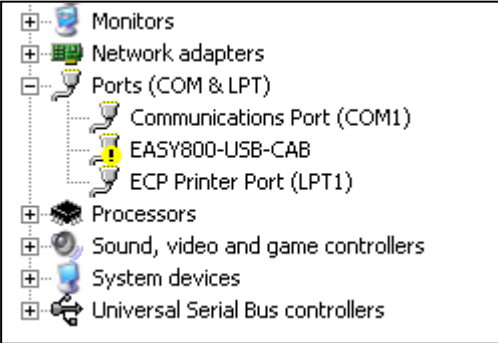
First, open the Device Manager and check the status of the installed USB drivers. To do so, follow the steps below:

- Open the Device manager by opening the following Windows dialog boxes or using the following keyboard shortcuts.

Operating system	How to open the Device Manager
Windows 2000 / XP	My Computer – Properties – Hardware – Device Manager or Windows key  + Pause/Break key - Hardware – Device Manager
Vista and Windows 7	Start – Control Panel – "Hardware und Sound" – "Devices and Printers" – Device Manager or Windows key  + Pause/Break key
Windows 8	Windows key  + X – Device Manager or Windows key  + Pause/Break key – Device Manager
Command prompt	Enter "devmgmt.msc" + Return key

"Ports (COM & LPT)" lists all active communication ports.

- Check whether there is an entry for the USB programming cable under "Ports (COM & LPT)".
- Check the "What did you find out?" column in the table below and once you find the scenario that best matches your case, follow the troubleshooting steps provided.

What did you find out?	Troubleshooting step / Additional questions
<p>There is no entry for the USB programming cable in the Device Manager under "Ports (COM & LPT)"</p>	<p>Is the USB programming cable plugged in?</p> <ul style="list-style-type: none"> ▶ Plug in the USB programming cable and check again to see if an entry appears.
<p>There is an entry for the USB programming cable under "Other devices" in the Device Manager</p>	<p>Did you install the drivers?</p> <ul style="list-style-type: none"> ▶ Run the entire driver installation routine as described in the "Installation" chapter.
	<p>Is there an entry for the USB programming cable under "Other devices"?</p>
<p>The Device Manager shows an "Unknown device"</p>	<p>Windows did not find a matching USB driver.</p> <ul style="list-style-type: none"> ▶ Click on the device. ▶ Select the "Uninstall" option in the context menu and uninstall. ▶ Unplug the USB programming cable from the computer. <p>Then install the USB drivers as described in the "Installation" chapter step by step.</p>
<p>There is an entry for the USB programming cable in the Device Manager under Ports (COM & LPT), but the entry has a yellow exclamation point on it</p>	<p>Interference at the USB Port in your PC/laptop</p> <ul style="list-style-type: none"> ▶ Use a different USB Port..
	<p>You have connected a USB cable extension and the entire cable length is more than 3-5 m.</p> <ul style="list-style-type: none"> ▶ Connect a cable without an extension. <p>Windows was unable to fully install the driver and add it to the system configuration, or other drivers (e.g., a "USB-to-serial adapter") are blocking the USB driver's installation in Windows.</p> <p>To find the corresponding error code, follow the steps below:</p> <ul style="list-style-type: none"> ▶ Click on the device. ▶ Select the "Properties" option from the context menu. ▶ Check the device status on the "General" tab. <p>An error code will be shown, e.g., "The device cannot start (Code 10)".</p> <ul style="list-style-type: none"> ▶ Solution: "Install the USB driver on Windows step by step".

An error code is shown in the Device Manager, device context menu, "Properties," "General" tab

Install the USB driver on Windows step by step.
To do so, follow the steps below:

- ▶ Click on the device.
- ▶ Select the "Update Driver Software..." option from the context menu.
- ▶ Select "Browse my computer for driver software".
- ▶ Select "Let me pick from a list of device drivers on my computer".
- ▶ Enable the "Show compatible hardware" check box by ticking the box.
- ▶ Click on the USB programming cable driver listed under "Model" and click on "Next".

If the computer shows a dialog box with the message "Windows has successfully updated your driver software," the installation has been successful

If an error code is shown again instead of the above message, there is a problem in Windows that is preventing the drivers from being properly installed.

This could be due to the following:

A different driver (e.g., a "USB-to-serial" adapter) is blocking the USB driver's installation in Windows.

- ▶ Solution: "Remove the driver blocking the installation and install the USB driver again".

Remove the driver blocking the installation and install the USB driver again.

Proceed as follows:

- ▶ Undo the USB programming cable's Windows installation in the Device Manager.
- ▶ Unplug the USB programming cable from the computer/laptop.
- ▶ Disable or uninstall the third-party driver in the Device Manager.
- ▶ Unplug the non-Eaton device from the computer/laptop.
- ▶ Plug the USB programming cable into a free USB port.
- ▶ Install the drivers completely as described in the "Windows Installation" chapter.

If the USB programming cable cannot be successfully installed in Windows after performing these actions, follow the steps below:

- ▶ Follow the "Alternative" step.

Alternative

- ▶ Search for the error code on the Internet (see also: "Useful links" on page 25).
- ▶ Follow any troubleshooting steps recommended by Microsoft.

Problems When Pre-Installing the USB Drivers

What did you find out?	Troubleshooting step / Additional questions
"EASY USB Driver Installation" will not start.	<p>You do not have admin rights.</p> <ul style="list-style-type: none"> ▶ Log in as a user with admin rights. ▶ Right-click on the USBDriverInst.exe file and select the "Run as administrator" option from the context menu.
The "Install" button is grayed out.	<p>You have not selected a USB programming cable to install.</p> <ul style="list-style-type: none"> ▶ Select a USB programming cable by clicking on the corresponding check box. <p>All USB programming cables have already been installed/pre-installed.</p> <ul style="list-style-type: none"> ▶ No action required.
The "Uninstall" button is grayed out.	<p>You have not pre-installed a USB driver yet.</p> <ul style="list-style-type: none"> ▶ USB driver pre-installation. <p>The USB drivers have been successfully removed.</p> <ul style="list-style-type: none"> ▶ No action required. <p>All of the USB programming cables have already been installed in Windows.</p> <ul style="list-style-type: none"> ▶ See the "Undoing the Windows installation" section.
Message: "The driver package already exists and could not be pre-installed again".	<p>A pre-installed driver package is already found in the Windows driver store.</p> <ul style="list-style-type: none"> ▶ Plug in the programming cable and install the USB drivers in Windows. <p>Should I delete this pre-installed driver package?</p> <ul style="list-style-type: none"> ▶ Open the \Windows\System32 folder. ▶ Look for and open the "DRVSTORE" or "DriverStore" folder. ▶ In Vista/Windows 7 and higher, open the "FileRepository" folder. ▶ If you want to delete the driver package for EASY-USB-CAB, look for a folder called "e700..." and delete it. ▶ If you want to delete the driver package for EASY800-USB-CAB, look for a folder called "e800..." and delete it. ▶ If you want to delete the driver package for EU4A-RJ45-USB-CAB, look for a folder called "eu4a..." and delete it. ▶ Then pre-install the drivers again as described in the "Installation" chapter.

Assigning a different COM port number

Sometimes, it may be necessary or desirable to change the COM port number that is automatically assigned by Windows. To do this, follow the steps below:

- ▶ In the Device Manager under "Ports (COM & LPT)" find the communication port, e.g. "EASY800-USB-CAB" or "EASY800 USB to UART Bridge" for V4.40.
- ▶ Right-click the communication port and open the "Properties" dialog.
- ▶ Under "Port Settings" → "Advanced" set another COM port number.

➔ If possible, select a COM port number within a range of COM3 – COM32.

If some or all COM port numbers are marked as "already assigned", check whether this COM port is being used in a different device.

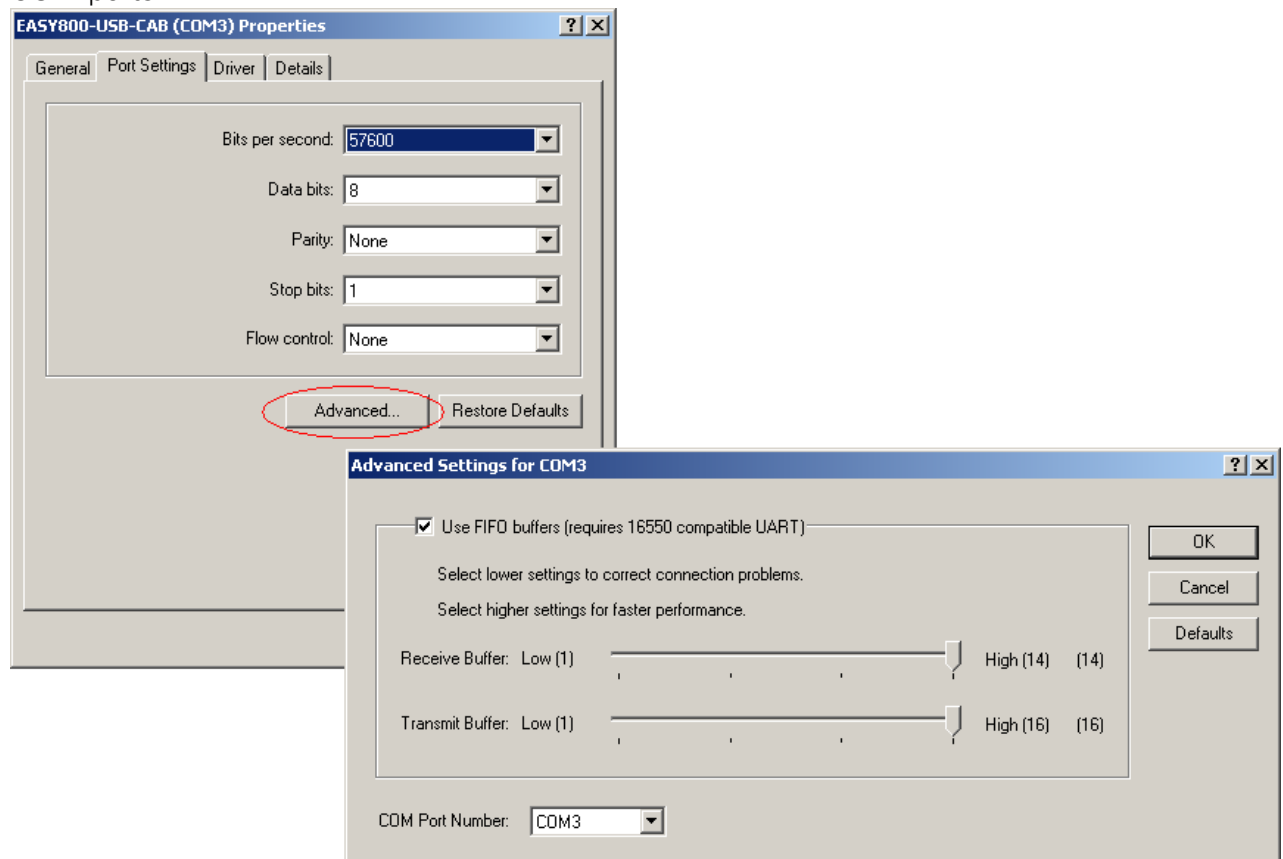
If this is not the case, you assign this number anyway and then acknowledge the warning with "OK".



CAUTION

If you are not sure, do not use a port number that is already assigned!

The COM port number is now permanently assigned. If you unplug the USB programming cable and then plug it back in (independently of the USB port), the same COM port number will be used. The communication port with this number will be shown as "already assigned" in the list of COM ports.



6 Useful links, useful troubleshooting tools and utilities



The links below point to websites on the Internet that are not maintained by Eaton. Because of this, we cannot guarantee that these links will be permanently functional.

Eaton assumes no product liability, nor provides any support, for the troubleshooting and analysis freeware tools and utilities listed here. The use of these tools is solely at your own risk.

Explanation of the failure codes that are generated by Device Manager and recommended solutions:

<http://support.microsoft.com/kb/125174> (up to Windows 2000)

<http://support.microsoft.com/kb/310123/de> (Windows XP)

<http://support.microsoft.com/kb/943104/de> (XP, Vista, 7, Windows Server 2003/2008)

USB error handling V2.2: This wizard provides a three-step troubleshooting guide that you can use, if your USB device is not being recognized. Every step comes with a detailed explanation, and the program will not make any automatic changes to your system.

<http://usb-fehlerbehebung.soft-ware.net/download.asp>

You can use the USBDeview freeware utility to obtain a list of all the USB devices that have been connected to the computer, including devices that are currently connected (32-bit and 64-bit versions available): Selected USB devices can be uninstalled even if they are not currently connected to the computer.

[Download USBDeview at www.chip.de](http://www.chip.de)