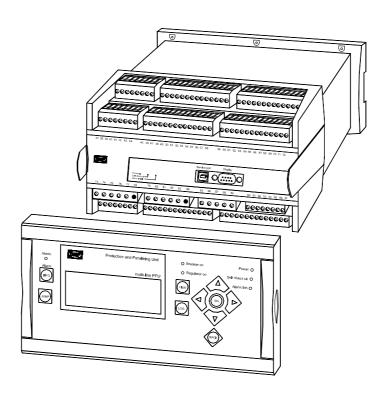
Description of options



Option H10, Multi-line 2 unit with USB service port



- To be used when the multi-line 2 unit service port is USB type
- Hardware option

CE



Table of contents

1.	WARNINGS AND LEGAL INFORMATION	3
	LEGAL INFORMATION AND RESPONSIBILITY	3
2.	DESCRIPTION OF OPTION	4
3.	WIRING	5
4.	COMPUTER DRIVER INSTALLATION	6
5.	FINDING THE COM PORT NUMBER OF THE USB CONVERTER ON YOUR COMPUTER	12
6.	ADJUSTING THE USB COMMUNICATION PORT PARAMETERS ON YOUR COMPUTER	14
7.	HOW TO CHANGE THE COM PORT NUMBER (IF REQUIRED)	15
8.	CONFIGURATION OF THE DEIF MULTI-LINE 2 UTILITY SOFTWARE	16
9.	HOW TO UNINSTALL THE DRIVER ON YOUR COMPUTER (IF REQUIRED)	17

1. Warnings and legal information

Legal information and responsibility

DEIF takes no responsibility for installation or operation of the generator set and transformer. If there is any doubt about how to install or operate the generator/transformer set controlled by the unit, the company responsible for the installation or the operation of the set must be contacted.

The units are not to be opened by unauthorised personnel. If opened anyway, the warranty will be lost.

Electrostatic discharge awareness

Sufficient care must be taken to protect the terminals against static discharges during the installation. Once the unit is installed and connected, these precautions are no longer necessary.

Safety issues

Installing the unit implies work with dangerous currents and voltages. Therefore, the installation should only be carried out by authorised personnel who understand the risks involved in working with live electrical equipment.



Be aware of the hazardous live currents and voltages. Do not touch any AC measurement inputs as this could lead to injury or death.

Definitions

Throughout this document a number of notes and warnings will be presented. To ensure that these are noticed, they will be highlighted in order to separate them from the general text.

Notes



The notes provide general information which will be helpful for the reader to bear in mind.

Warnings



The warnings indicate a potentially dangerous situation which could result in death, personal injury or damaged equipment, if certain guidelines are not followed.

DEIF A/S Page 3 of 18

2. Description of option

This document describes how to install the USB driver on a PC that will run the DEIF multi-line 2 utility software linked to a multi-line 2 unit by means of a USB cable.

Product features

- Supports the RS232 serial interface
- Supports windows 98/se/me/2000/xp

System requirements

- IBM PC 486DX4-100 MHz CPU or higher or compatible system
- Available USB port
- CD-rom drive

All the installation instructions must be followed. When the installation is completed, you can connect the USB cable (delivered by DEIF when ordering a multi-line 2 unit equipped with a USB type service port) to a multi-line 2 unit (see the wiring description on the next page) and power up the multi-line 2 unit.

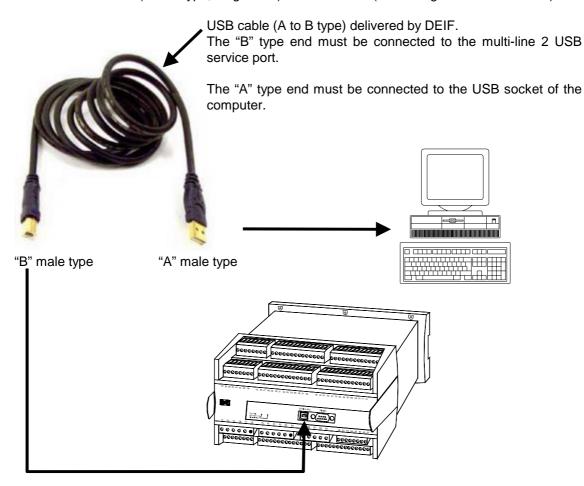


USB is an abbreviation of Universal Serial Bus. More detailed information is available from the Universal Serial Bus Internet homepage at: www.usb.org.

DEIF A/S Page 4 of 18

3. Wiring

When receiving a multi-line 2 unit equipped with a USB service port (instead of db9 type), you will find a USB cable (A to B type, length 3 m) and a CD-rom (containing the USB PC driver).





Types "A" and "B" are standard, defined by the USB specification. More detailed information is available from the Universal Serial Bus Internet homepage at: www.usb.org.

DEIF A/S Page 5 of 18

4. Computer driver installation

Follow the steps below to install the USB driver on the computer. The following screen dumps are based on a Windows XP system, which is the most used PC system in the world today. Other PC systems are not explained here. However, if you are using another PC system, it will be quite similar.

Power up your computer and make sure that the USB port is enabled and working properly.

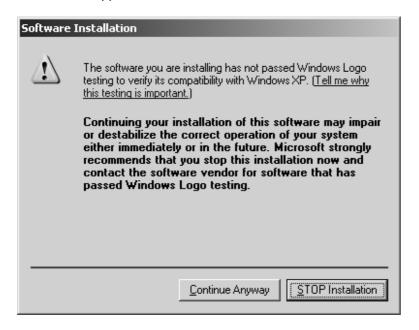
Important: Do not connect the USB cable between the computer and the multi-line 2 unit.

First the DEIF multi-line 2 utility software must be installed (this software can be downloaded free of charge from the DEIF web page at: www.deif.com). At the end of the installation process of the DEIF multi-line 2 utility software, the window below will appear, and the USB driver installation will begin.



Press the "Install" button, and all the useful installation files will be copied to your PC on your C:\ drive (hard disk), at: :\Program Files\deif\CP210x.

This window appears:



Press the "Continue anyway" button several times for proceeding with this installation process.

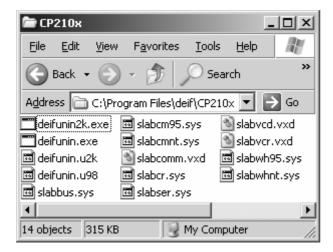
DEIF A/S Page 6 of 18

Finally, this message will be shown:



Press the "OK" button.

Finally you can check that all the files below are now present on your PC in the right folder.



Now the USB cable must be connected between the computer and the multi-line 2 unit service port.

The window below appears:



Select the "No, not this time" option, and then press the "Next" button.

DEIF A/S Page 7 of 18

Select the automatic installation (first option) and press "Next".



This window appears:



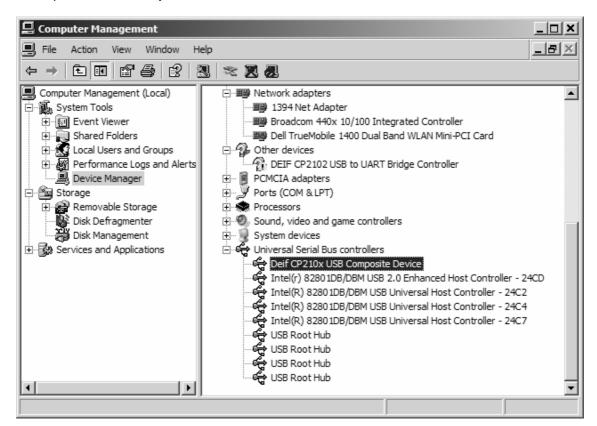
Press the "Continue anyway" button for proceeding with this installation process.

DEIF A/S Page 8 of 18



Press the "Finish" button.

It is now possible to see from the Device Manager of your PC (see chapter 5) that the first USB driver part is successfully installed.



DEIF A/S Page 9 of 18

It is now necessary to repeat the last operations for installing the driver for the virtual Com Port.

The window below appears:



Select the "No, not this time" option, and then press the "Next" button.

Select the automatic installation (first option) and press "Next".



This window appears:



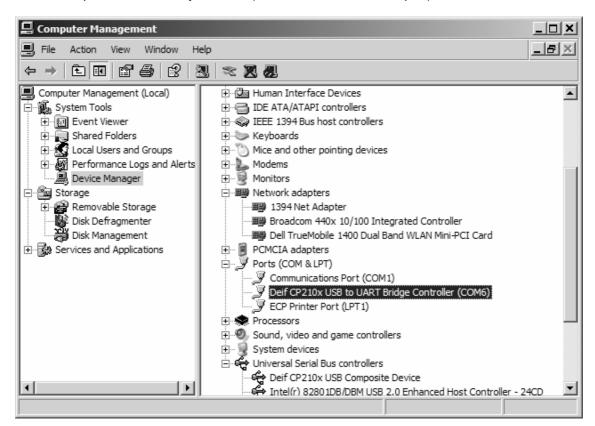
Press the "Continue anyway" button for proceeding with this installation process.

DEIF A/S Page 10 of 18



Press the "Finish" button.

It is now possible to see from the Device Manager of your PC (see chapter 5) that the second USB driver part is successfully installed (driver for the virtual Com port).



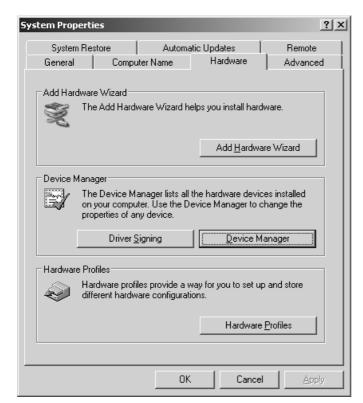
DEIF A/S Page 11 of 18

5. Finding the com port number of the USB converter on your computer

Press "Start" and select "Control Panel".

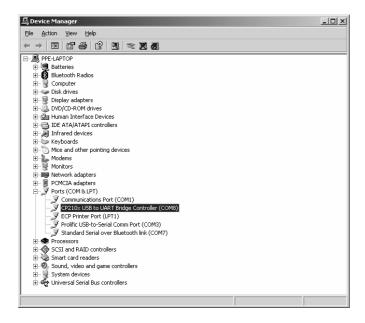


Double click on "System" and select "Hardware".



Press "Device Manager" and double click on "Ports (COM & LPT)".

DEIF A/S Page 12 of 18



As you can see in the above screen dump, the USB link is successfully installed and is called "COM8" on the computer. This information will be useful for the future configuration of the utility software (see chapter Configuration of the DEIF utility software).

DEIF A/S Page 13 of 18

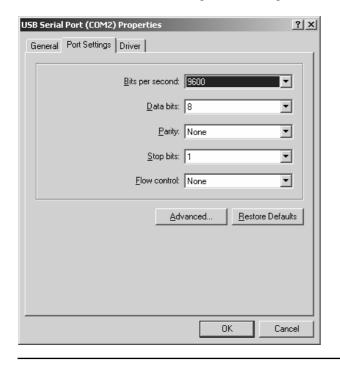
6. Adjusting the USB communication port parameters on your computer

Open the device manager window (as described on the previous page) and double click on the line "CP210x USB to UART Bridge Controller (COM8)".



If the Device status is not "This device is working properly.", or if you have a problem with the device, try restarting windows. If the problem persists, do a reinstallation of the drivers or contact the DEIF support team.

Otherwise, choose "Port Settings" and configure all like this:



Afterwards, press "OK" and close all opened windows.

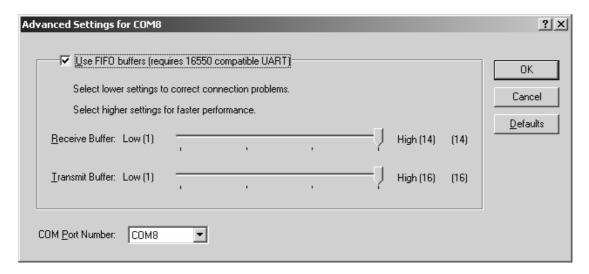
The configuration of the USB converter is now finished.

You now open the DEIF utility software and check the software version. Our newest version can be downloaded free of charge from the DEIF web site at: www.deif.com.

DEIF A/S Page 14 of 18

7. How to change the COM port number (if required)

Referring to the USB serial port (COM2) property window described on the previous page, click on the "Advanced" button.



Select the required COM port in the COM Port Number field and press the "OK" button.

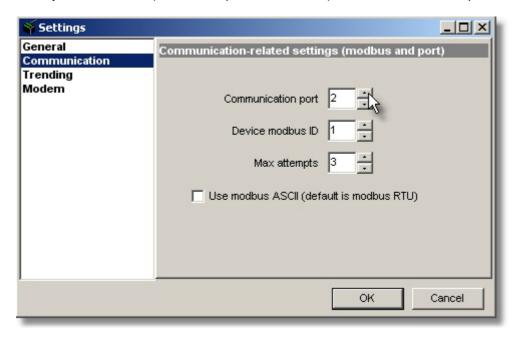
DEIF A/S Page 15 of 18

8. Configuration of the DEIF multi-line 2 utility software

When opened, choose the menu "File" and "Settings", or select the hammer icon indicated by the mouse pointer.



Choose "Communication" and select the same COM port as previously. If it is COM2 in your case, you then enter 2 (or use the up or down arrows) in the Communication port field.



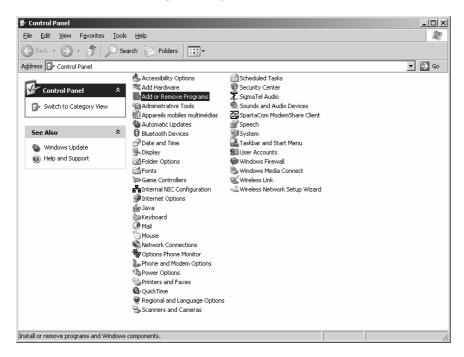
Press "OK", and the above window will close.

You are now ready to work "on-line" with the utility software connected to a multi-line 2 unit through the USB type service port and the USB COM2 port of your computer.

DEIF A/S Page 16 of 18

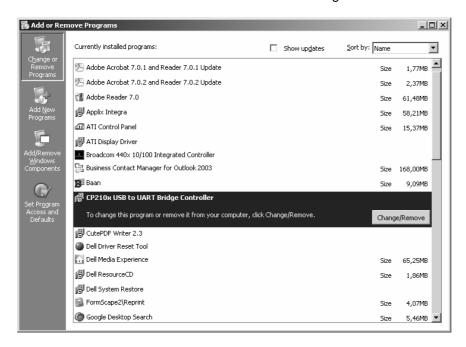
9. How to uninstall the driver on your computer (if required)

If you want to remove this application (or driver) from your computer in future, press "Start" and select "Control Panel" on your computer.



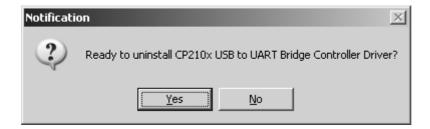
Double click on the line "Add or Remove Programs".

Find and click on the line "CP210x USB to UART Bridge Controller".



Press "Change/Remove".

DEIF A/S Page 17 of 18



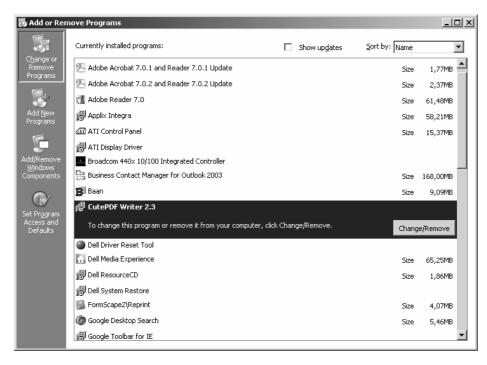
Press "Yes".

After a while, you will get a confirmation that the driver has been successfully uninstalled.



Press "OK".

By refreshing the "Add or Remove Programs" window, you will notice that this program/driver is actually gone.



For further technical data, please refer to the Designer's Reference Handbook.

DEIF A/S reserves the right to change any of the above

DEIF A/S Page 18 of 18