

VCI - Virtual CAN Interface

VCI-V2 Installation Manual

Software Version 2.16

IXXAT

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1 Overview

The VCI is a universal CAN-driver for all PC/CAN-cards from IXXAT and already included in the scope of delivery of the CAN-cards. As DLL for Windows 95/98/NT/2000/XP, it forms the interface between the user application and the various IXXAT PC/CAN-Interface. A special feature is its uniform programming interface, which enables various card types to be interchanged without having to adapt the user software.

Installation of the VCI consists of two steps:

- (1)** Installation of the software.
Please note the information in Section 9.1, if a previous version of the VCI driver is already installed.
- (2)** Installation of the hardware

This manual gives instructions on carrying out these two steps.

Depending on the operating system and PC/CAN-interface, different procedures are necessary for the installation. This manual therefore contains a separate section for each operating system.

Independently of the operating system and the PC/CAN-Interface used, the following procedure should be followed:

- (1)** Install the CAN-driver software VCI.
- (2)** Select the relevant section in the manual according to the operating system used.
- (3)** Select the relevant sub-section according to the CAN-hardware to be installed.
- (4)** If explicit installation is required, install the CAN-hardware as described in this manual.
- (5)** Familiarize yourself in working with the IXXAT Interfaces Applet with the aid of Section 4.

2 Support

Further information on our products, as well as FAQ lists and tips on installation are given in the support section of our homepage (<http://www.ixxat.de>). There you can also obtain information on current product versions and available updates.

If you have further questions after studying the information on our homepage and the manuals, please contact our support department. The relevant forms for support enquiries can be found in the support section of our homepage. To facilitate our support work and enable a quick response, please provide exact details on the relevant points and describe your question or problem in detail.

If you would prefer to phone our support department, please also send a relevant support enquiry first via our homepage so that our support department has the relevant information available.

2.1 Returning hardware

If it should be necessary to return hardware to us, please download the relevant RMA form from the support section of our homepage and follow the instructions on this form.

In the case of repairs, please also describe the problem or error in detail on the RMA form. This enables us to process your repair quickly.

3 Installation of the driver software VCI



Installation from CD

Insert the IXXAT Drivers and Demos CD into the CD-drive.

Windows will automatically start a menu window where you select the english language. In the following dialog click on "Drivers" and start the installation of the VCI driver software.

If the menu window was not started automatically then start the installation manually by executing the file VCIxxx.exe (xxx represents the version of the VCI) in the directory "Drivers" on the CD.

Follow the instructions in the installation program.

4 The IXXAT Interfaces Applet

With the installation of the VCI-driver software, an "IXXAT Interfaces" Applet is installed in the Windows Control Panel. It provides an overview about the already installed IXXAT PC/CAN-Interfaces and is used to test these. Interfaces that are not automatically detectable by Windows and for which there is no Windows installation wizard are to be installed here manually.

4.1 Starting the IXXAT Interfaces Applet

With Windows 95/98/NT/2000 (and Windows XP with classic start menu view) the IXXAT Interfaces Applet can be found directly within the Control Panel window.



Figure 4-1: The IXXAT Interfaces Applet in the Control Panel

With Windows XP start menu view the IXXAT Interfaces icon is contained by the subfolder "Other Control Panel Options".

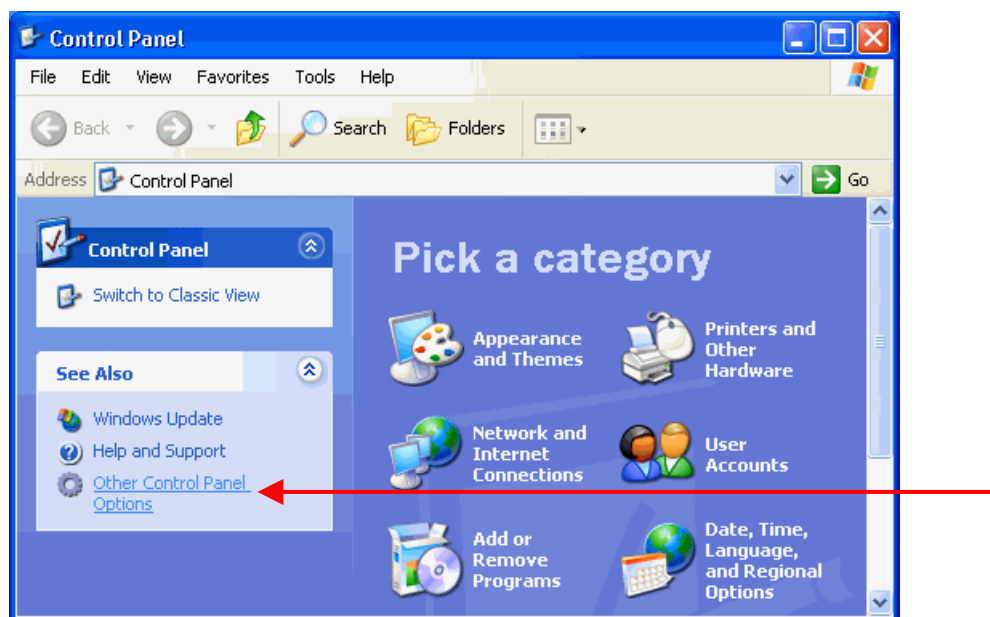


Figure 4-2: Windows XP Control Panel

4.2 Display function of the IXXAT Interfaces Applet

The IXXAT Interfaces Applet supplies the user with information on installed IXXAT PC/CAN-interfaces and their configuration (address, IRQ etc.).

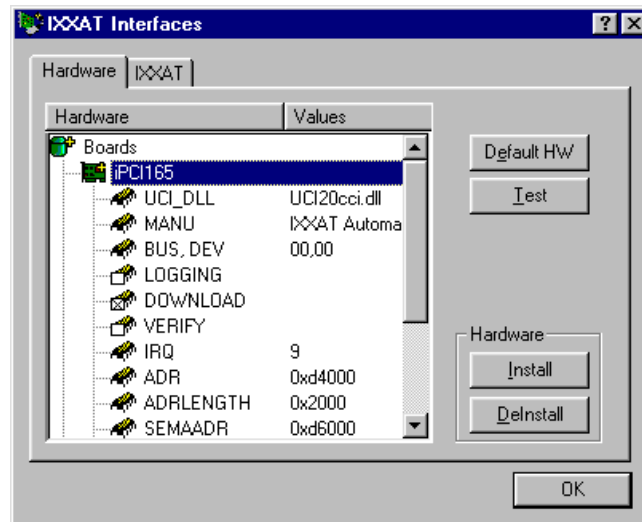


Figure 4.2-1: Information on an installed iPC-I 165

The entries LOGGING, DOWNLOAD and VERIFY have a special function:

- **LOGGING:** When Logging is activated, the log files "ccidpram.log" and "ucidpram.log" are generated by the driver. All call-ups are protocolled to the driver in these files.



Only activate Logging if there are problems during start-up of the PC/CAN-interfaces. The log files become large very quickly and performance is greatly restricted.

Please help our support department to solve your problem by attaching these two log file in zipped form to your support request to support@ixxat.de

- **DOWNLOAD:** This entry only exists for active CAN-hardware. With this entry you can determine whether the firmware is loaded onto the board when the board is opened.
- **VERIFY:** This entry also exists only for active CAN-hardware. When VERIFY is activated, the downloaded firmware is re-checked after the download phase.



Verification of the downloaded firmware may take some time, depending on the type of PC/CAN-interface.

4.3 Access test to a PC/CAN-Interface

Access to an installed PC/CAN-interface can be tested via the "Test" button. The dialog then opened provides detailed information on specific properties of the board.

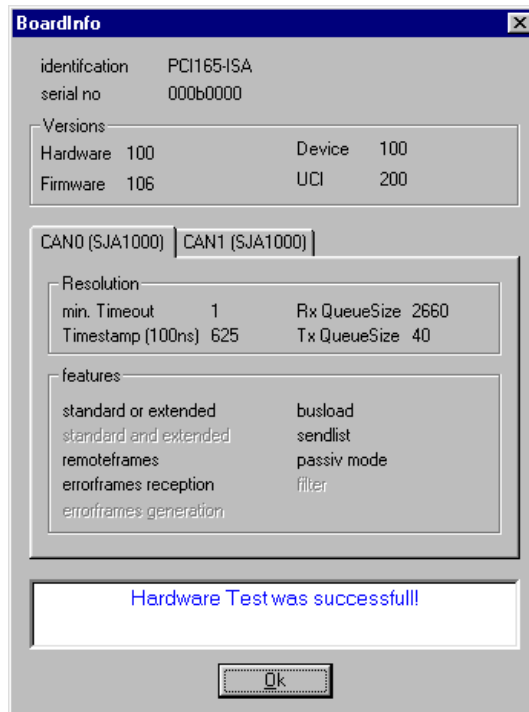


Figure 4.3-1: Specific properties of the installed board



This test is not supported for CANdy (Windows 95/98/ME/NT) and iPC-I 386.

5 Hardware installation Windows 95/98

Hardware type		Installation method	Section
PCI	iPC-I 320/PCI iPC-I 165/PCI PC-I 04/PCI	via automatically started hardware wizard	5.1
PCMCIA	tinCAN byteflight CARD	via automatically started hardware wizard	5.1
USB	USB-to-CAN USB-to-CAN compact	via automatically started hardware wizard (only Win98SE)	5.1
ISA	iPC-I 320 iPC-I 165 PC-I 03	via manually started hardware wizard	5.2
PC/104	iPC-I 320/104 PC-I 04/104	via manually started hardware wizard	5.2
LPT	CANdy CANdy-lite	via IXXAT Interfaces Applet	5.3
TCP/IP	CAN@net	via IXXAT Interfaces Applet	5.4

5.1 Installation of PCI-, USB- or PCMCIA-Interface



Installing the new IXXAT hardware is made easier under Windows if you install the VCI-Software before you install the IXXAT CAN-Hardware. The driver is then found automatically and does not have to be copied from an external data medium.

If no VCI-Software has been installed, you should make sure that you have the IXXAT installation-CD to hand.

Installation is carried out via the hardware wizard, which detects the newly installed card automatically.

- (1) Install your PC/CAN-interface in the computer, or plug the tinCAN into the PCMCIA slot, or connect the USB-to-CAN adapter to your USB-port. For this, please also note any instructions in the hardware manuals.
- (2) When Windows 95/98 is first booted after the PCI-card has been installed or after the tinCAN has been plugged in (or the USB-to-CAN), the Hardware Wizard is started automatically. The following dialog appears, which you acknowledge with "Next".

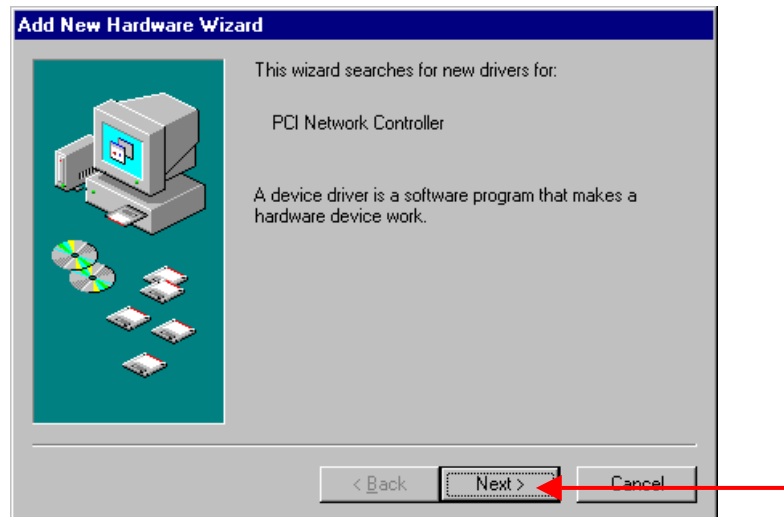


Figure 5.1-1: New PCI-component found

- (3) A driver must be installed for the PC/CAN-Interface which has been found. If the VCI or the driver has already been installed, Windows detects this and skips points (4) and (5).

If the VCI has not yet been installed, Windows asks for the requested method to search for it. Mark the search for the best driver for the device and continue with "Next".



Figure 5.1-2: Procedure for driver search

- (4) Insert the IXXAT installation-CD.



If installing the driver from the IXXAT installation-CD, enter the directory Drivers\Win9x on the installation CD as driver position (the driver cannot be found by marking the "CD-ROM"-button!).

Start searching for the driver with "Next".

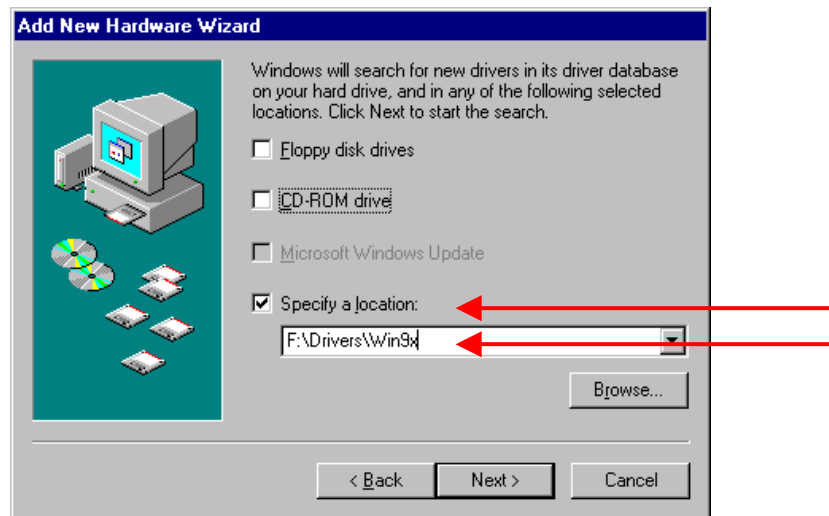


Figure 5.1-3: Entering the search directories

- (5) Windows finds a driver for the new PC/CAN-interface and the following dialog appears (here for the iPC-I 320/PCI). Acknowledge the dialog with "Next".

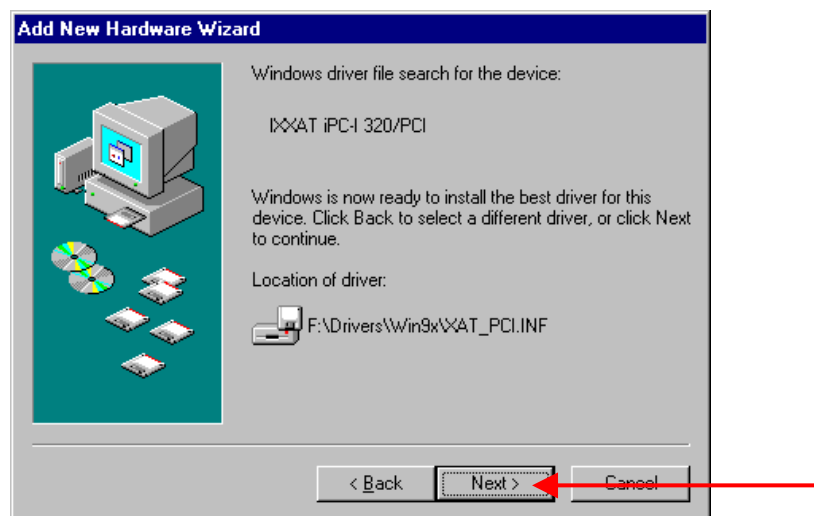


Figure 5.1-4: driver found

- (6) Windows now copies the driver found and signals success with a last dialog. Close the installation by clicking on the "Finish" button.



Figure 5.1-5: Installation successful

After successful installation of the PCI-driver and provided the VCI-driver software has already been installed, the card (here iPC-I 320/PCI) is visible in the Control Panel Applet IXXAT Interfaces and ready for use.

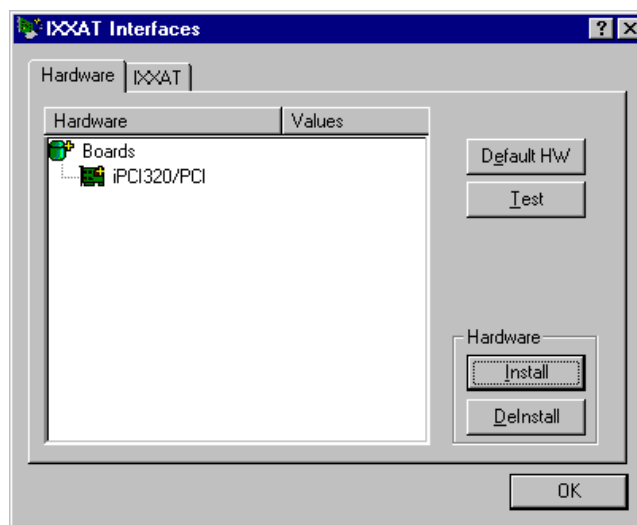


Figure 5.1-6: iPC-I 320/PCI installed

5.2 Installation of ISA-cards

Before installing an ISA-card, it is absolutely essential to first find a free address space in the working memory and a free IRQ. For this, open the Device Manager (via applet "System" in the Control Panel) and display the properties of the "Computer".

- ★ The address settings on the card are made by means of 16-bit DOS segment addresses (e.g. D200) which are also described this way in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing rather than addressing the memory in a linear way. Therefore the board's segment address (e.g. D200...D3FF) is declared as linear address under Windows (e.g. D2000...D3FFF).

The free address and the IRQ found are then set on the card by means of jumpers and dipswitches (see hardware manual). The IRQ has to be reserved in the BIOS for ISA-cards.

- 💡 Installing the new IXXAT hardware is made easier under Windows if you install the VCI-Software before you install the IXXAT CAN-Hardware. The driver is then found automatically and does not have to be copied from an external data medium.

5.2.1 Installation

- (1) Start the Hardware Wizard.
This is in the Start menu under "Control Panel"

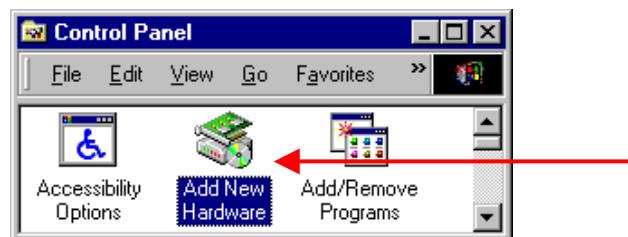


Figure 5.2-1: Starting the Hardware Wizard

- (2) The Hardware Wizard now asks you to close all other open applications. Do this and acknowledge the dialog with the "Next" button.

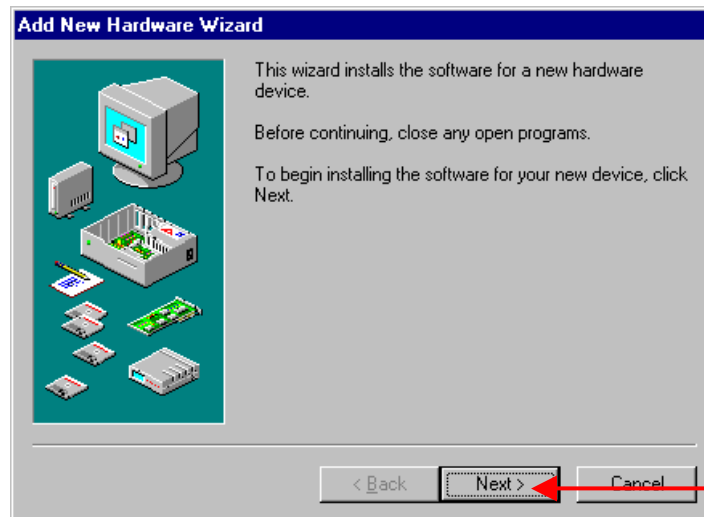


Figure 5.2-2: The started hardware wizard

- (3) Start the automatic identification of new Plug & Play devices with the "Next" button.



This dialog only appears under Windows 98 !



Figure 5.2-3: Automatic identification of Plug & Play devices

- (4) When the automatic identification is complete, the following dialog with a list of found Plug & Play devices appears. Answer the question as to whether the device to be installed is shown in the list with "No" and continue the installation with the "Next" button.
Note: The list may also be empty.



This dialog only appears under Windows 98 !

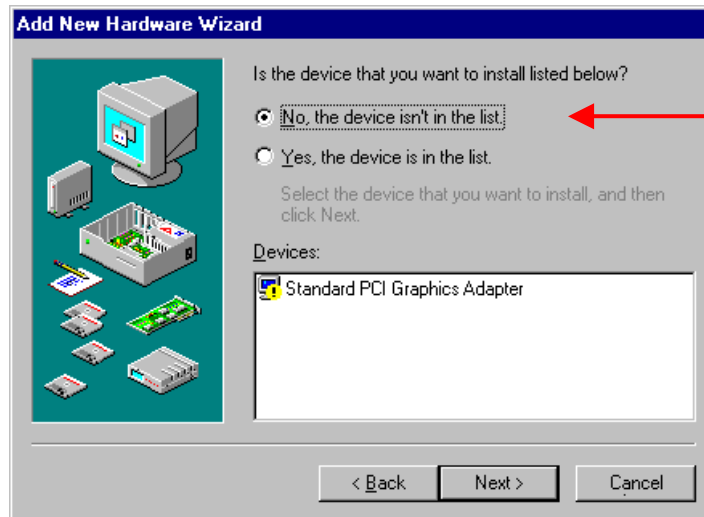


Figure 5.2-4: List of found Plug & Play devices

- (5) The hardware wizard asks whether it should search for other hardware. This is not the case.



Figure 5.2-5: Search for standard hardware

- (6) If the VCI-software was already installed before the hardware installation, you can select "IXXAT CAN-interfaces" in the list of known hardware types and continue with point (9) via the "Next" button. If this is not the case, select "Other devices" and continue with the "Next" button.



Figure 5.2-6: Selection of the hardware type

- (7) The hardware wizard now offers you a list of hardware manufacturers and their models. However, since you have a installation CD, click on the "Have Disk" button without selecting a certain manufacturer.

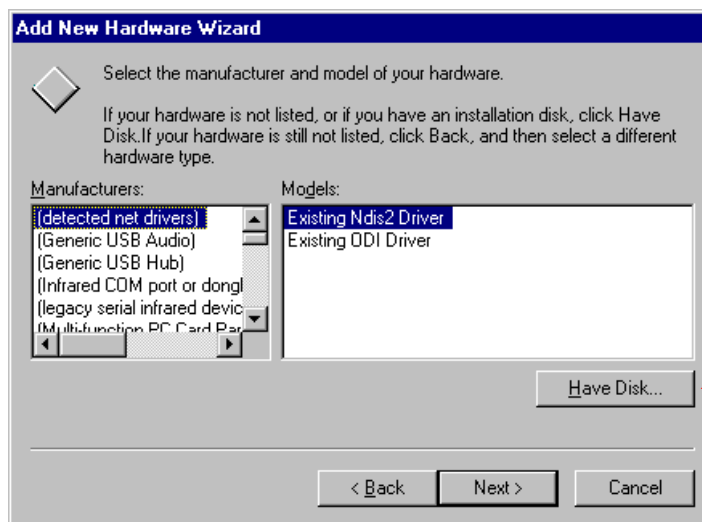


Figure 5.2-7: List of hardware manufacturers

- (8) Insert data medium with INF-file:

- Insert the IXXAT installation CD and enter the CD-ROM drive as source. The necessary .inf files are found in the directory Drivers\Win9x.

Start copying with "OK".



Figure 5.2-8: Request for driver disk

- (9) The hardware wizard now provides a selection of drivers. Select your PC/CAN-interface and continue the installation with "Next".

★ Our PC/104 interfaces are identical to the appropriate versions for the ISA bus. Therefore select model iPC-I 320 for installation of a iPC-I 320/104 interface or model PC-I 03 for installation of a PC-I 04/104 interface.

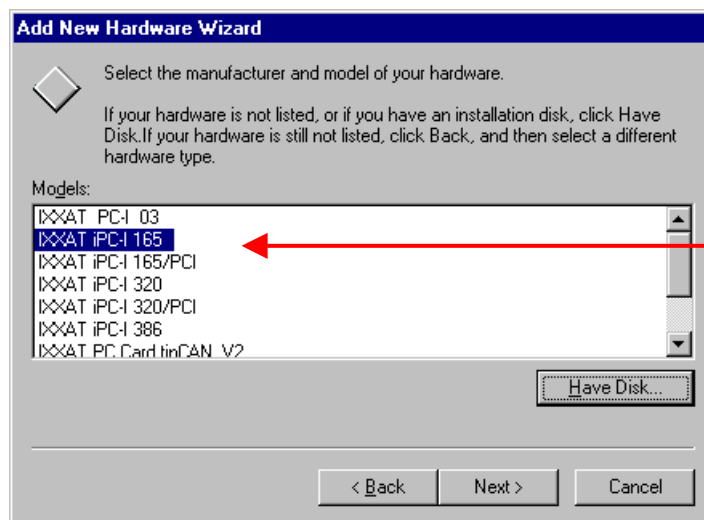


Figure 5.2-9: Selection of the driver to be installed

★ The selected driver will now be installed. This may take some time!

- (10) The following dialog shows you the settings of the newly installed PC/CAN-interface recommended by Windows. If these do not match the address and IRQ set by you on the hardware, you can adapt them later in the hardware settings (see Section 4.2). However, you must first accept the recommended settings and click on the "Next" button.

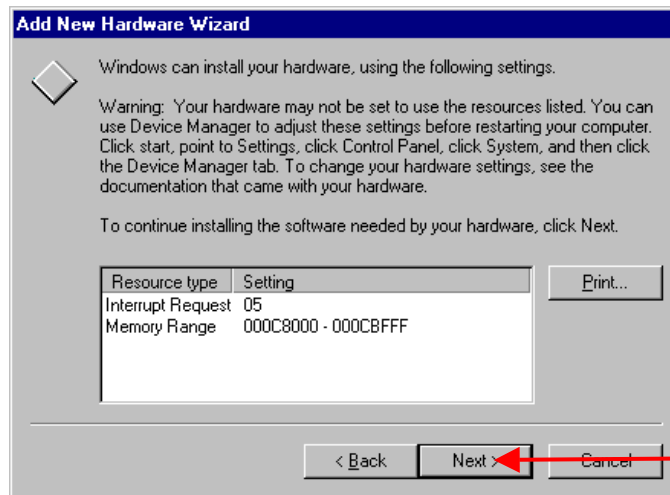


Figure 5.2-10: Default settings

- (11) The installation of the new component is now complete and can be ended with "Finish".



Figure 5.2-11: Installation finished



Windows now asks you to restart the computer. If the recommended settings do not match the values set on the card, you should alter them before restarting. For this, read Section 0.

5.2.2 Changing the default settings

An ISA-card is always installed by the Hardware Wizard with the default settings (address and IRQ). If these do not correspond to the values set on the card via jumpers and dipswitches, they must be altered as described in this section.

- (1) Open the Control Panel.
Start the "System"-Applet in the Control Panel.

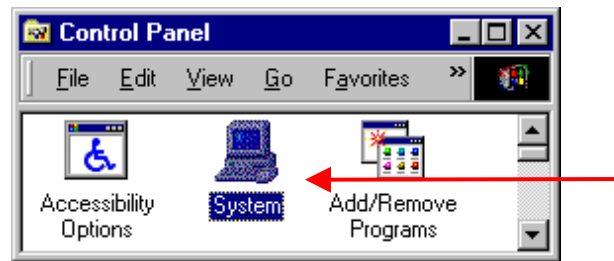


Figure 5.2-12: Starting the System Applet

- (2) Select the installed PC/CAN-interface in the Device Manager.
In the System Applet, select the "Device Manager" tab and open the properties of the PC/CAN-interface.

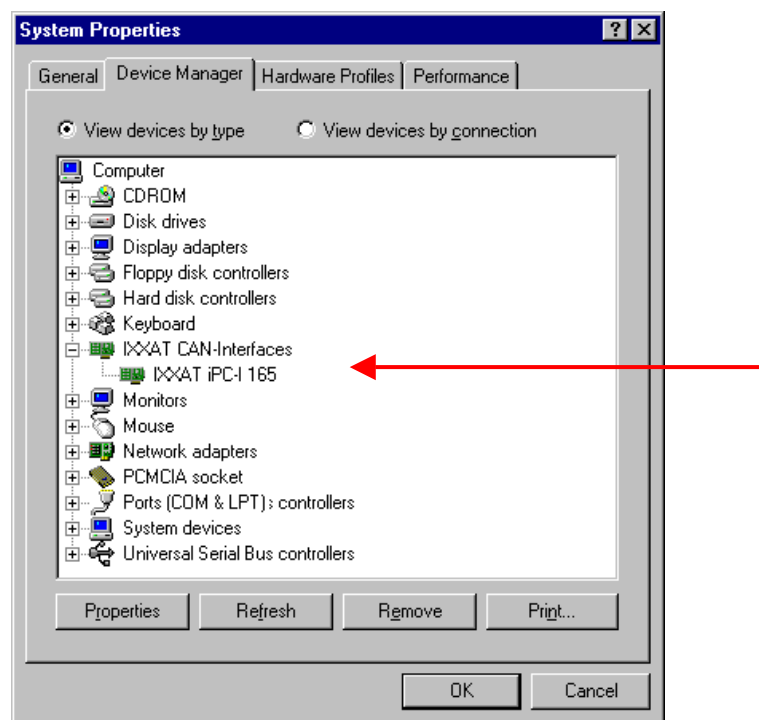


Figure 5.2-13: The Device Manager

- (3) Change the settings.
If you now switch to the "Resources" tab in the appearing Hardware Properties dialog, you will see the settings entered by Windows during the installation.
Adapt these settings to the address and interrupt you adjusted on the interface.
Alterations are adopted with "OK". The computer must then be restarted.

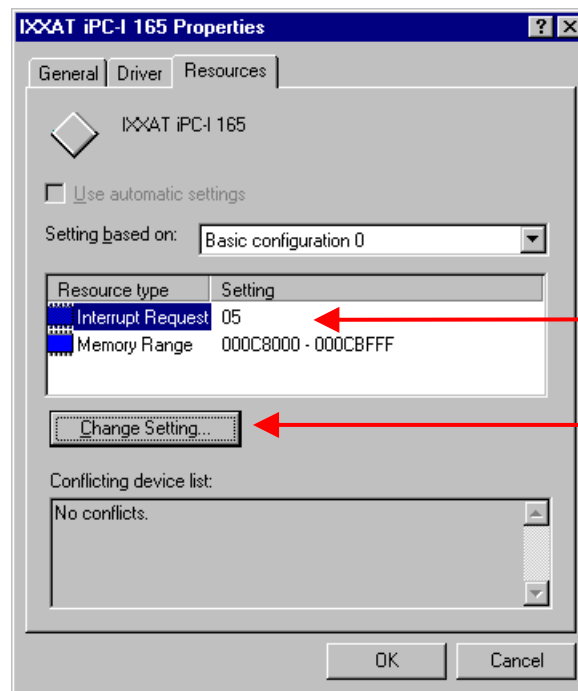


Figure 5.2-14: Altering the PC/CAN-interface settings

5.3 Installation of CANDy and CANDy lite

CANDy and CANDy lite are installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.

- (1) Start the IXXAT Interfaces Applet in the Control Panel.

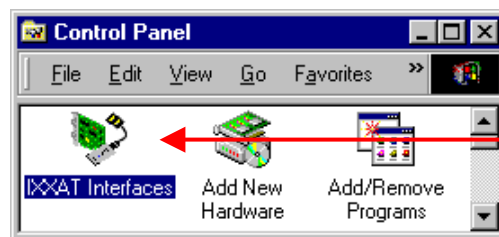


Figure 5.3-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the Applet in order to install the hardware.

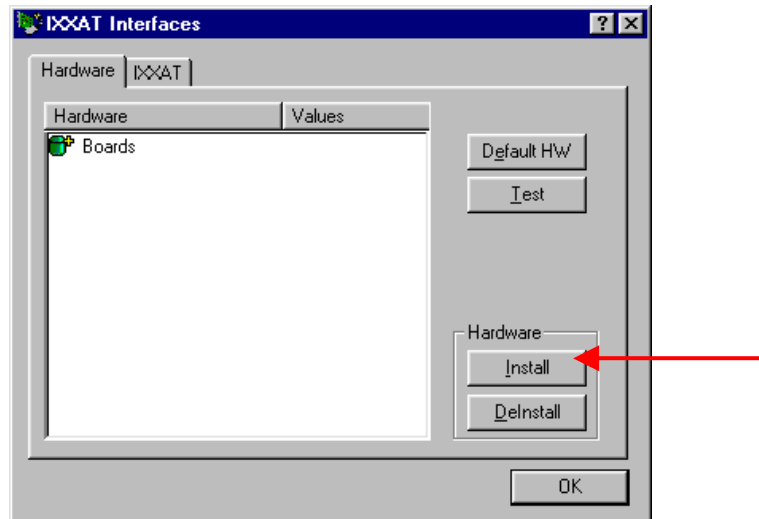


Figure 5.3-2: IXXAT Interfaces Applet

- (3) After you selected "IXXAT CANDy Install" an installation dialog appears, where hardware type and port number must be selected. In addition, the address and IRQ of the chosen parallel port are displayed. Select the type of parallel port CAN-interface to be installed (CANDy, CANDy lite).

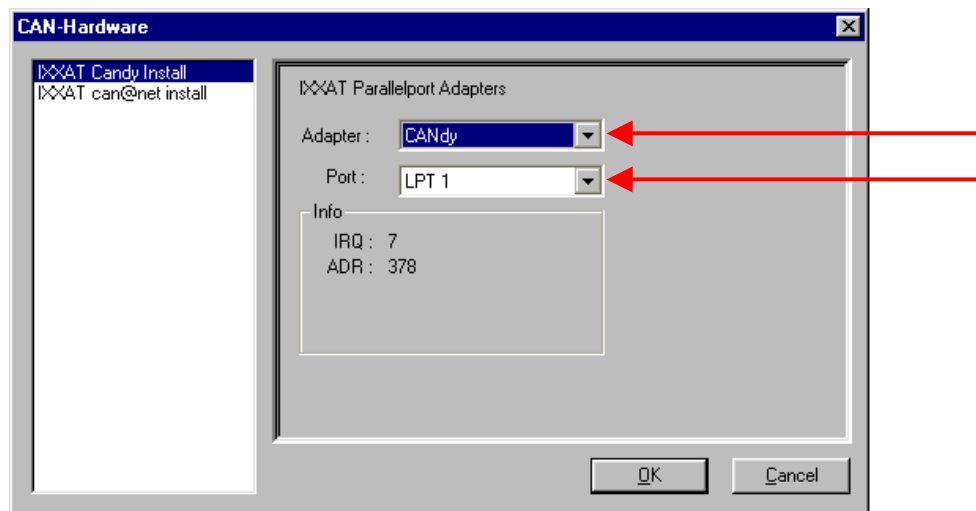


Figure 5.3-3: Installation of a parallel port CAN-interface

- (4) Select the parallel port to which the CAN-interface is connected.
- (5) End the installation by "OK".
- (6) The main window of the IXXAT Interfaces Applet now shows the CANDy installed in the example.

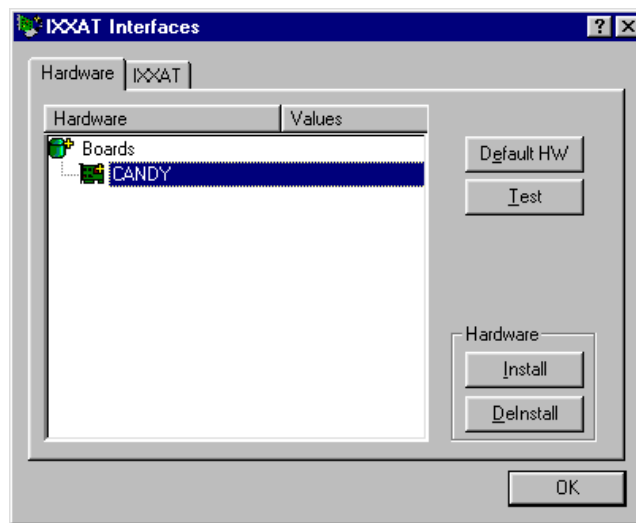


Figure 5.3-4: The Applet after installation of the CANDy interface



Testing the device with the "Test"-button is only possible with CANDy lite, not with CANDy.

5.4 Installation of CAN@net

CAN@net is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.



If you already worked with CAN@net and older versions of VCI perhaps you want to reuse the existing CAN@net configurations (symbolic name, IP address and password). Therefore move the file `xatcn_nt.ini` into the directory `C:\Windows\system`. Such a file was created in the application directory of each application that used CAN@net. After the next startup of IXXAT Interfaces applet your previous CAN@net configurations will be available.

- (1) Start the IXXAT Interfaces Applet in the Control Panel.

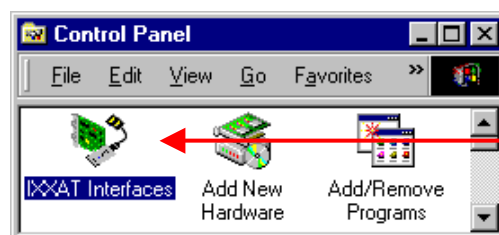


Figure 5.4-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the applet in order to install new hardware.

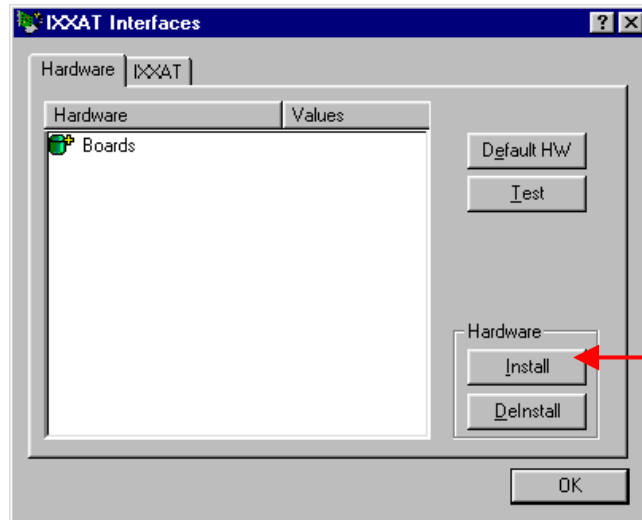


Figure 5.4-2: IXXAT Interfaces Applet

- (3) A CAN@net installation dialog appears after selecting "IXXAT CAN@net Install". Create a new configuration by clicking the "Add" button.

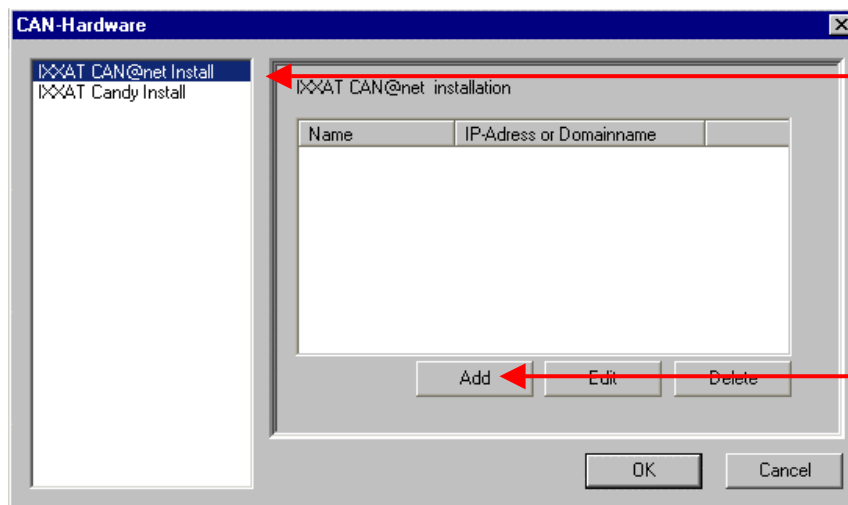


Figure 5.4-3: Installation of CAN@net

- (4) Define a symbolic name, the IP address and the password. If there is a DNS entry for the CAN@net device you may alternatively type in a domainname instead of the IP address. The default password at delivery time is "Ixxat".

In the Description field you may input additional userdefined description text. Add new text lines with Ctrl+Enter.

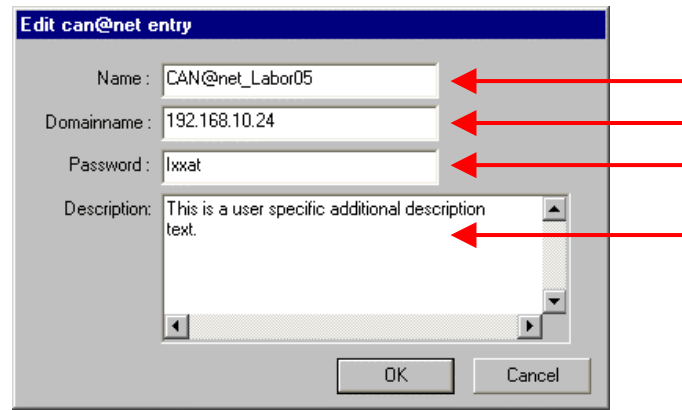


Figure 5.4-4: New CAN@net configuration

! IP address and password are configurable via RS232 connector of the CAN@net interface (refer CAN@net Hardware Manual).

- (5) The new configuration appears within the installation dialog. Clicking the "OK" button will set up a CAN@net device based on the selected configuration.

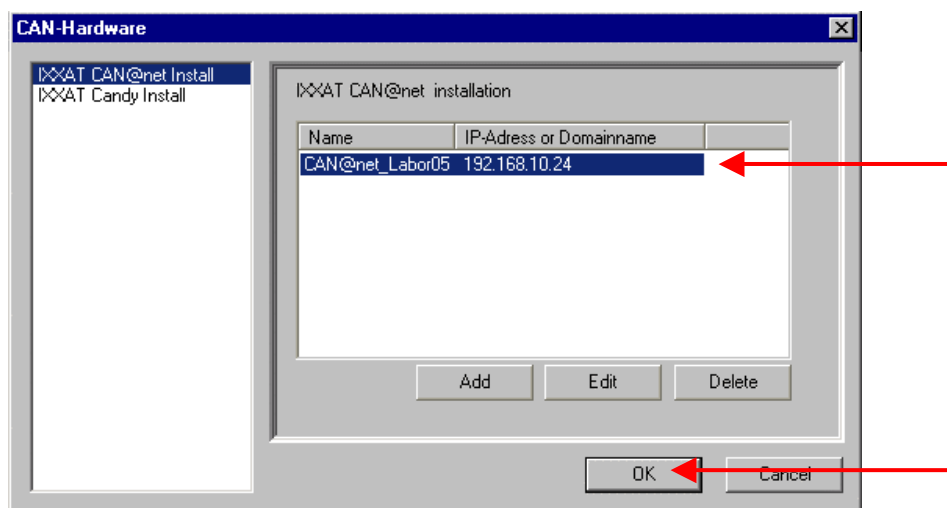


Figure 5.4-5: Installation dialog with new CAN@net configuration

If installation dialog contains more than one configuration you can use another device by selecting another configuration. Existing configurations can be edited via the "Edit" button and deleted via the "Delete" button.

- (6) The set up CAN@net device now appears in the main window of the IXXAT Interfaces applet. If the configured IP address and password is correct the access test via the "Test" button can be performed.

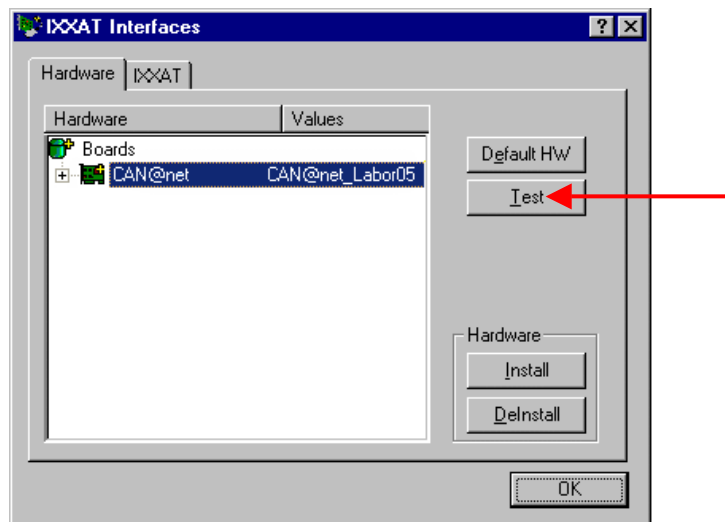


Figure 5.4-6: Applet after installation of the CAN@net interface

6 Hardware installation WindowsNT



Under WindowsNT the user must be logged in with administrator authorization in order to be able to carry out a hardware installation!

"PNP OS" must be disabled in the Bios. Otherwise some drivers may be not started.

Hardware type		Installation method	Section
PCI	iPC-I 320/PCI iPC-I 165/PCI PC-I 04/PCI	automatic identification by the VCI driver	
PCMCIA	tinCAN byteflight CARD	via IXXAT Interfaces Applet	6.1
USB		not supported under WindowsNT	
ISA	iPC-I 320 iPC-I 165 PC-I 03	via IXXAT Interfaces Applet	6.2
PC/104	iPC-I 320/104 PC-I 04/104	via IXXAT Interfaces Applet	6.2
LPT	CANdy CANdy-lite	automatic identification by the VCI driver	
TCP/IP	CAN@net	via IXXAT Interfaces Applet	6.3



Under WindowsNT it is absolutely essential for the VCI-driver software to be installed first. Only then is an installation of CAN-hardware possible.



The access test via IXXAT Interfaces applet is not supported for CANdy and iPC-I 386.

6.1 Installation of PC-cards (PCMCIA-cards)

WindowsNT is not a Plug&Play operating system and only installs a very rudimentary PC-card driver. In most cases, however, this is sufficient to operate IXXAT PC-cards.

With mainboards and PC-card slots on which the standard WindowsNT PC-card driver does not work, a so-called "Card Enabler"-software from other suppliers

can be of help. This contains a more extensive and more flexible driver for PC-cards. The PC-card installation with an installed Card Enabler differs from installation without one.



If no Card Enabler is installed, the PC-card must be inserted in the slot before booting WindowsNT.

Although Card Enablers claim to provide hotplug-ability for the PC-cards, it is usually better to insert the PC-card in the slot before booting.

6.1.1 Installation without Card Enabler

- (1) Start the IXXAT Interfaces Applet in the Control Panel. The VCI-driver software must have been installed.

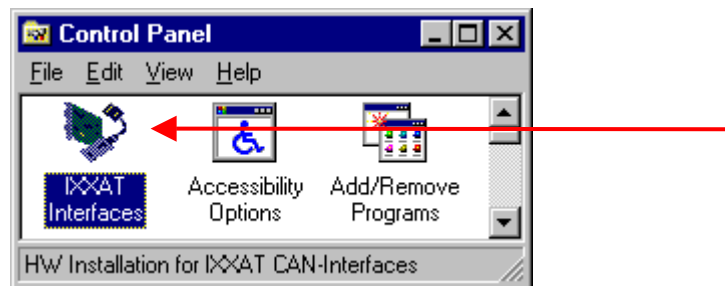


Figure 6.1-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the Applet in order to install new IXXAT hardware.

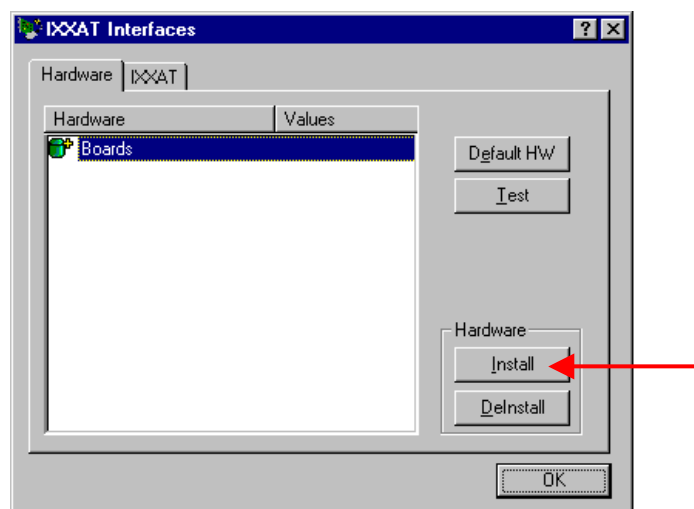


Figure 6.1-2: The IXXAT Interfaces Applet

- (3) Select "IXXAT PC-Card Install" from the list box on the left-hand side of the dialog. The configuration form of the IXXAT PC-card then appears on the right-hand side of the dialog.

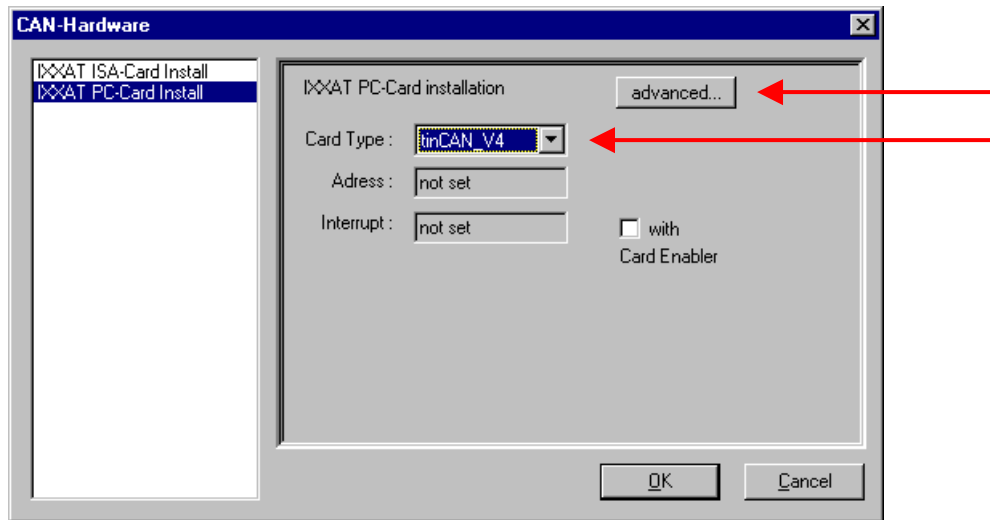


Figure 6.1-3: Installation of an IXXAT PC-Card

The form shows the card type, the Address and the Interrupt of a card. Select the type of your card.

As you have not installed a Card Enabler, neither the Address nor the Interrupt is configured ("not set"). Make sure that the button "with Card Enabler" is not set.



Your settings on the right-hand side of the dialog will be lost if you change the hardware type before confirming with "OK".

Click on the „advanced..." button in order to get to the next dialog.

- (4) Set a free Address and a free Interrupt.

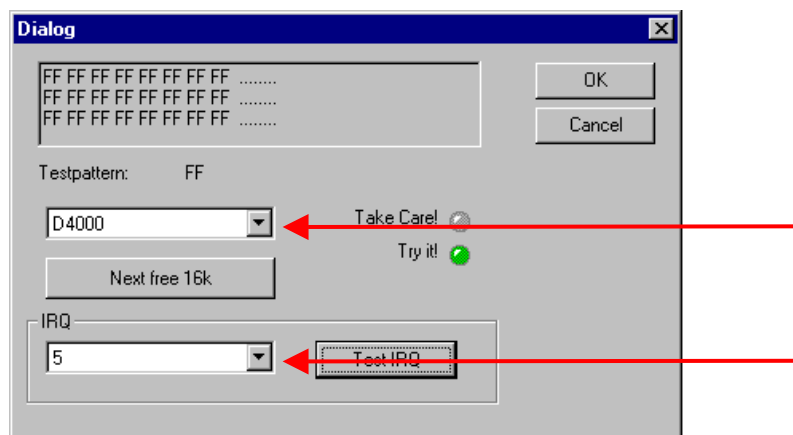


Figure 6.1-4: Setting a free address and a free Interrupt

- (5) If the red LED "Take Care!" is lit, the set storage area is occupied. The next free storage area can be found with "Next free 16k".
- (6) When the green LED "Try it!" is lit, the Applet detects a free storage area.
- (7) You can test reservation of the Interrupt with the "Test IRQ" button. If the test fails, set another Interrupt and test this again.

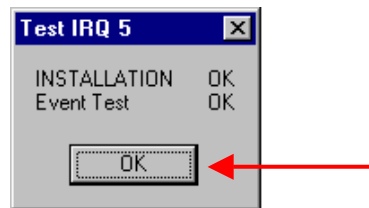


Figure 6.1-5: Test of the set Interrupt



Even if a storage area or IRQ has been recognized here as being free, it cannot be guaranteed under WindowsNT that these resources are actually free. It may be necessary to try out several Address/Interrupt - combinations.

There is no tool under WindowsNT, as under Windows95/98 or Windows2000/XP, with which a free storage area can be found via visualization of storage allocation.

- (8) Close the dialogs with the "OK"-button and reboot WindowsNT.
- (9) To adopt the settings, start the IXXAT Interfaces Applet in the Control Panel again and click the "Install" – button there. Activate "IXXAT PC-Card Install" there again.

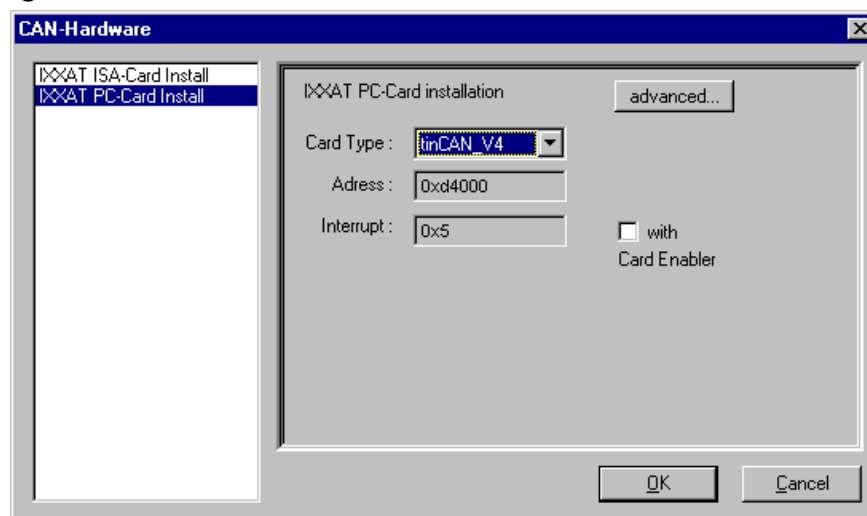


Figure 6.1-6: Adopting settings

Hardware installation WindowsNT

The settings for Address and Interrupt previously made are now displayed. Adopt these settings with the "OK" button, without opening the "advanced..." dialog.

- (10) The main window of the IXXAT Interfaces Applets shows the installed PC-card.

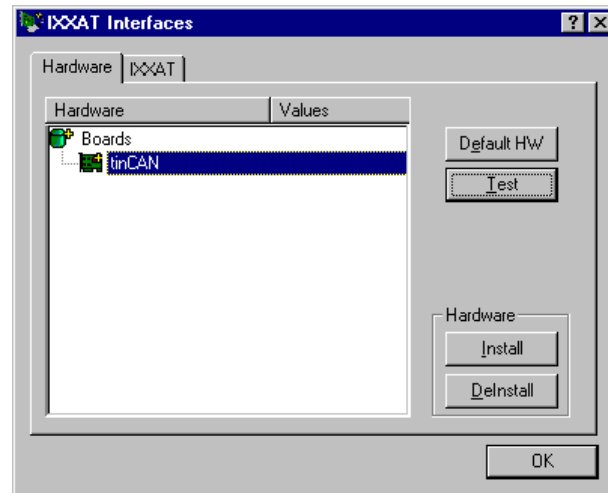


Figure 6.1-7: The Applet after installation of a tinCAN

An access test can be carried out on the newly installed card with the "Test" button.

6.1.2 Installation with Card Enabler

- (1) Start the IXXAT Interfaces Applet in the Control Panel. The VCI-driver software must have been installed first.

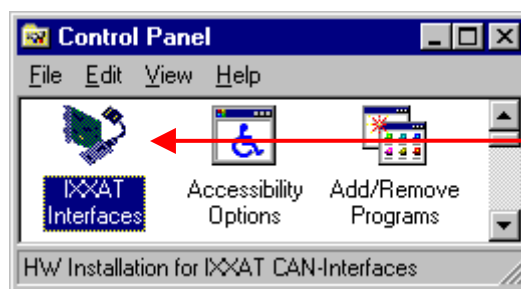


Figure 6.1-8: Starting the IXXAT Interfaces Applet

- (2) Click the "Install" button in the Applet in order to install new hardware.

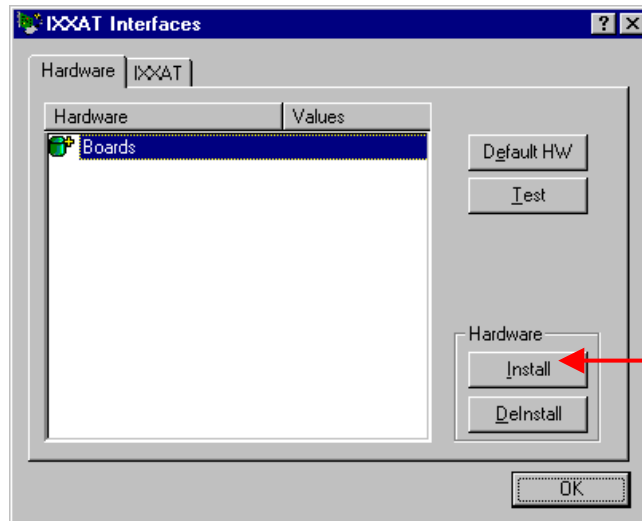


Figure 6.1-9: The IXXAT Interfaces Applet

- (3) Select „IXXAT PC-Card Install from the list box on the left-hand side of the dialog.
The form for the configuration of an IXXAT PC-Card then appears on the right-hand side of the dialog.

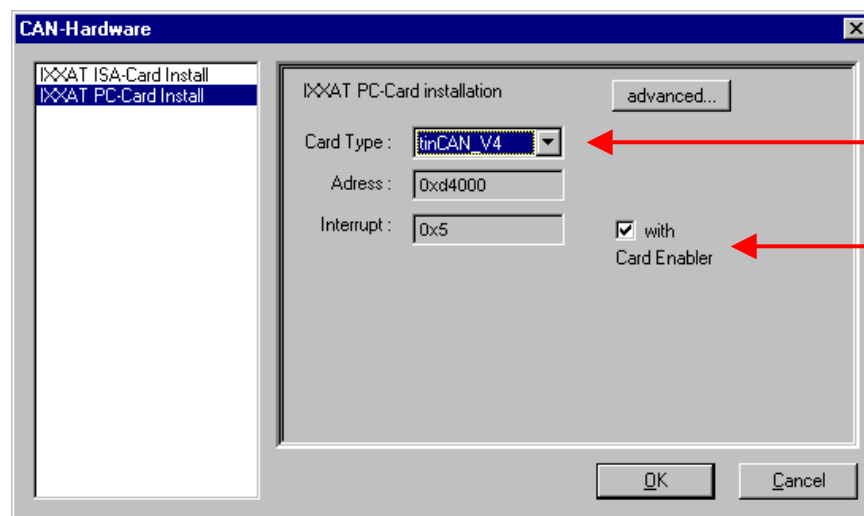


Figure 6.1-10: Adopting settings of the Card Enabler

The form shows the card type, the Address and the Interrupt of a card. Select the type of your card. As you have installed a Card Enabler, the Address and Interrupt have already been configured by this and are displayed. Set the button "with Card Enabler".

! Your settings on the right-hand side of the dialog will be lost if you change the hardware type before confirming with "OK".

Click on the "OK" button to adopt the settings.

- (4) The main window of the IXXAT Interfaces Applets now shows the installed PC-card.

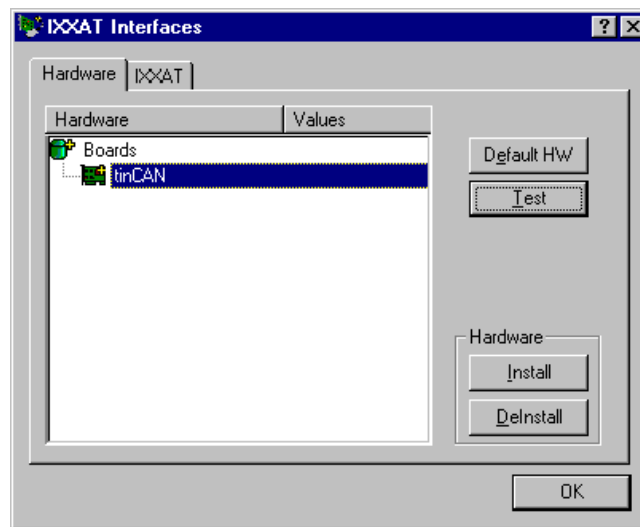


Figure 6.1-11: The Applet after installation of a tinCAN

An access test can be carried out on the newly installed card with the "Test" button.

6.2 Installation of ISA-cards

Before installing an ISA-card, it is absolutely essential to first find a free address space in the working memory and a free IRQ. For this, open the Windows NT Diagnostics (via Start menu Programs | Administrative Tools) and display the already used memory and IRQs.



The address settings on the card are made by means of 16-bit DOS segment addresses (e.g. D200) which are also described this way in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing rather than addressing the memory in a linear way. Therefore the board's segment address (e.g. D200...D3FF) is declared as linear address under Windows (e.g. D2000...D3FFF).

The free address and the IRQ found are then set on the card by means of jumpers and dipswitches (see hardware manual). The IRQ has to be reserved in the BIOS for ISA-cards.

- (1) Start the IXXAT Interfaces Applet in the Control Panel. For this, the VCI-driver software must have been installed.

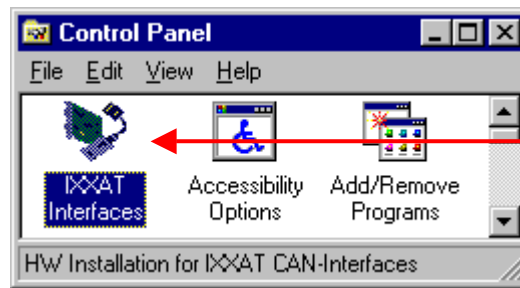


Figure 6.2-1: Starting the IXXAT Interfaces Applet

- (2) Click the "Install" button in the Applet in order to install new hardware.

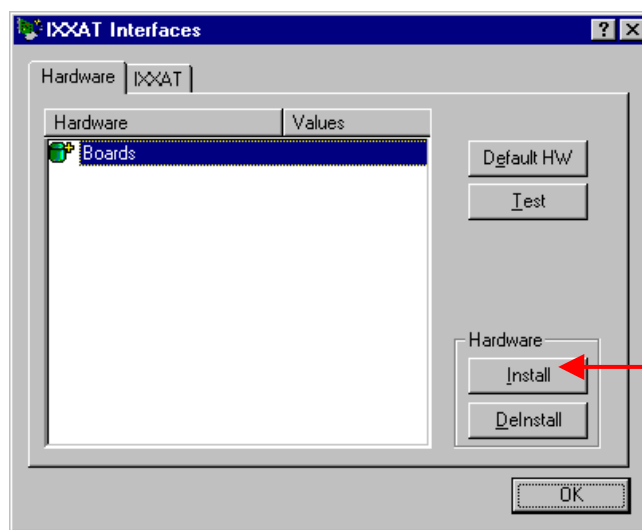


Figure 6.2-2: The IXXAT Interfaces Applet

- (3) To install an ISA PC/CAN-interface card, select "IXXAT ISA Card Install" from the list box on the left-hand side of the dialog. The form for the configuration of your ISA-Card.
In this form you can select the type of ISA-card, its Address and its Interrupt.

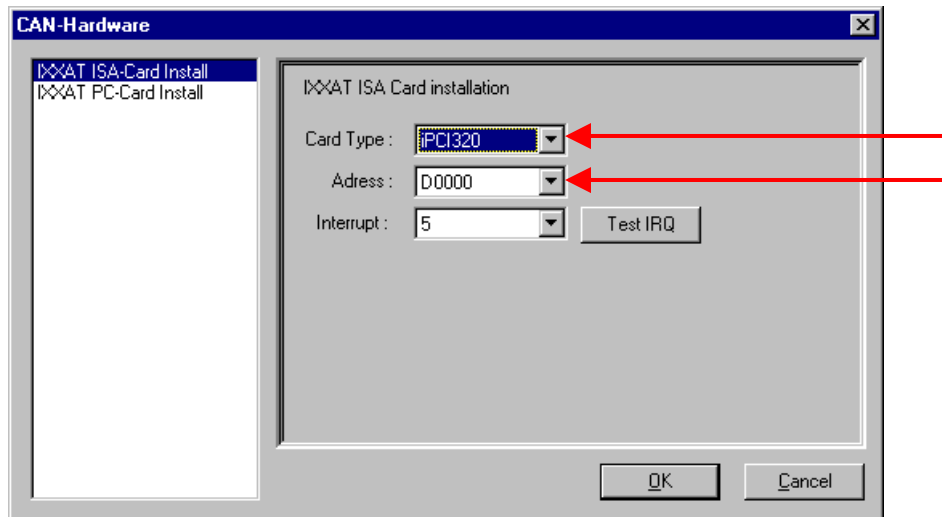


Figure 6.2-3: Installation of an ISA PC/CAN-interface card

Select the type of your card which you wish to install and set a free Address and a free Interrupt for it.



Our PC/104 interfaces are identical to the appropriate versions for the ISA bus. Therefore select type iPC-I 320 for installation of a iPC-I 320/104 interface or type PC-I 03 for installation of a PC-I 04/104 interface.



Your settings on the right-hand side of the dialog will be lost if you change the hardware type before confirming with "OK".

The availability of the Interrupt can be tested via the button "Test IRQ" and is acknowledged with the following dialog:



Figure 6.2-4: Set Interrupt available

Confirm your settings with the "OK" button.

- (4) The main window of the IXXAT Interfaces Applet now shows the installed ISA-card.

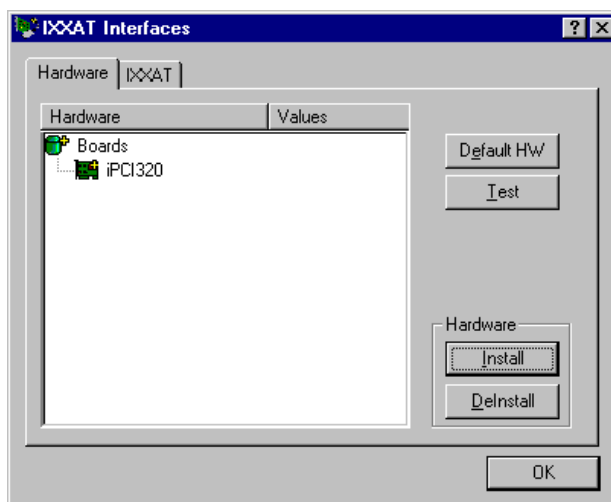


Figure 6.2-5: The Applet after installation of an iPCI320

An access test can be carried out on the newly installed card with the "Test" button.

- (5) Conclude the installation with the "OK" button.

6.3 Installation of CAN@net

CAN@net is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.

! If you already worked with CAN@net and older versions of VCI perhaps you want to reuse the existing CAN@net configurations (symbolic name, IP address and password). Therefore move the file `xatcn_nt.ini` into the directory `C:\Windows\system`. Such a file was created in the application directory of each application that used CAN@net. After the next startup of IXXAT Interfaces applet your previous CAN@net configurations will be available.

- (1) Start the IXXAT Interfaces Applet in the Control Panel.

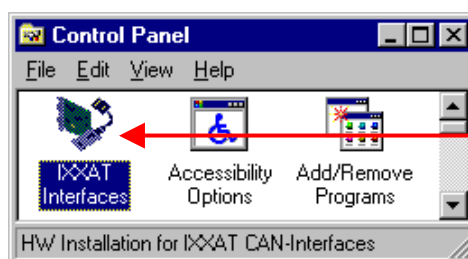


Figure 6.3-1: Starting the IXXAT Interfaces Applet

Hardware installation WindowsNT

- (2) Click on the "Install" button in the applet in order to install new hardware.

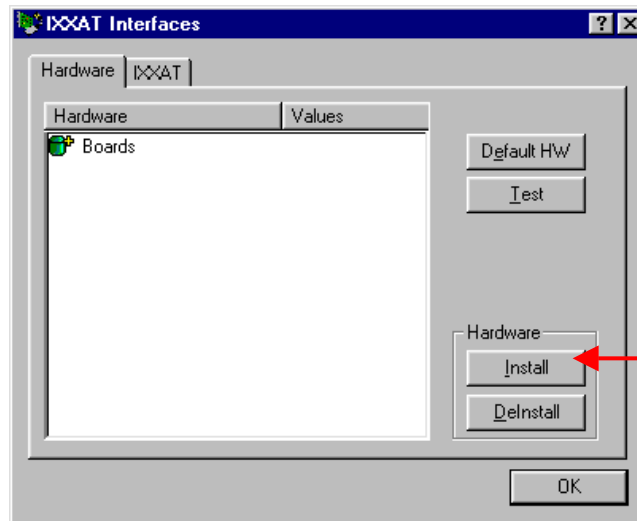


Figure 6.3-2: IXXAT Interfaces Applet

- (3) A CAN@net installation dialog appears after selecting "IXXAT CAN@net Install". Create a new configuration by clicking the "Add" button.

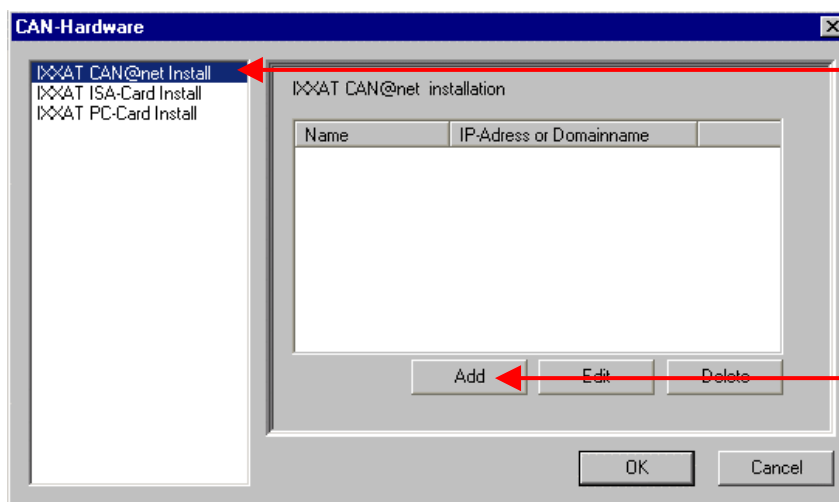


Figure 6.3-3: Installation of CAN@net

- (4) Define a symbolic name, the IP address and the password. If there is a DNS entry for the CAN@net device you may alternatively type in a domainname instead of the IP address. The default password at delivery time is "**lxxat**".

In the Description field you may input additional userdefined description text. Add new text lines with Ctrl+Enter.

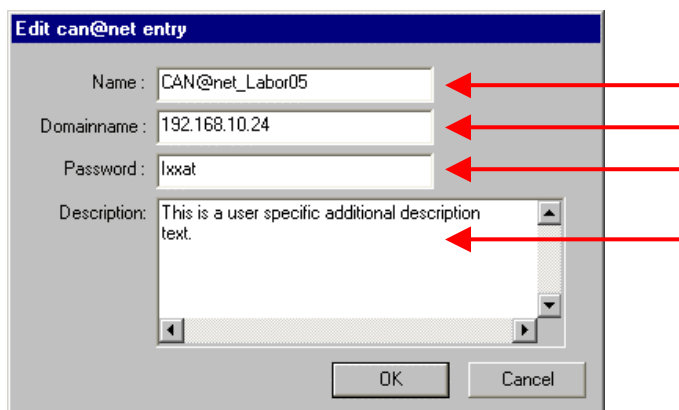


Figure 6.3-4: New CAN@net configuration

! IP address and password are configurable via RS232 connector of the CAN@net interface (refer CAN@net Hardware Manual).

- (5) The new configuration appears within the installation dialog. Clicking the "OK" button will set up a CAN@net device based on the selected configuration.

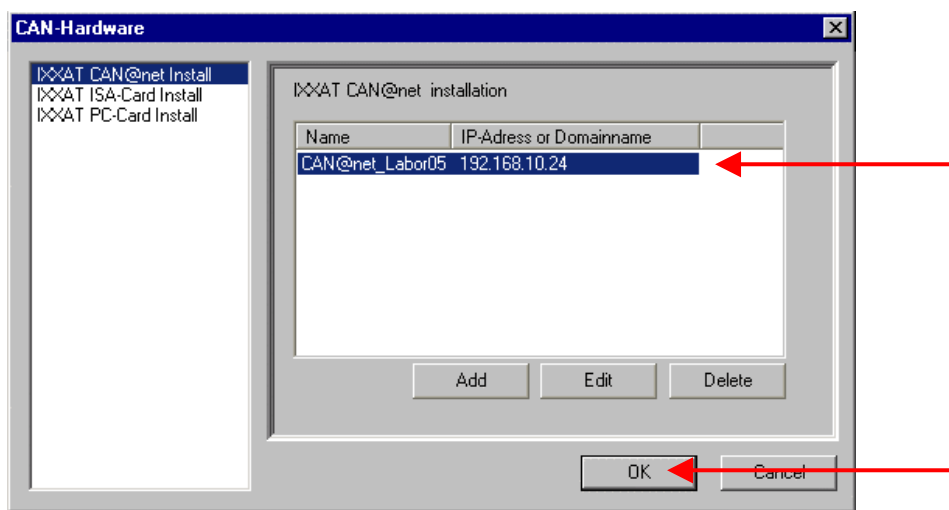


Figure 6.3-5: Installation dialog with new CAN@net configuration

If there is more than one configuration defined you can use another device by selecting another configuration. Existing configurations can be edited via the "Edit" button and deleted via the "Delete" button.

- (6) The set up CAN@net device now appears in the main window of the IXXAT Interfaces applet. If the configured IP address and password is correct the access test via the "Test" button can be performed.

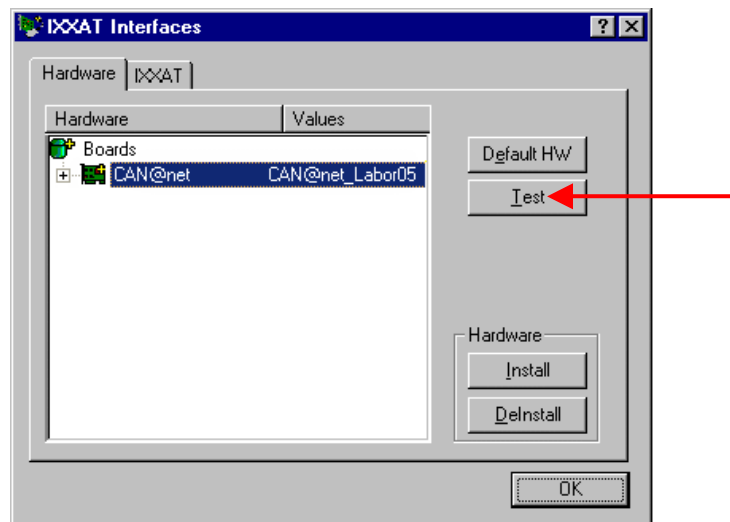



Figure 6.3-6: Applet after installation of the CAN@net interface

7 Hardware installation Windows2000

 Under Windows2000 the user must be logged in with administrator authorization in order to carry out new hardware installation.

Hardware type		Installation method	Section
PCI	iPC-I 320/PCI iPC-I 165/PCI PC-I 04/PCI	via automatically started hardware wizard	7.1
PCMCIA	tinCAN byteflight CARD	via automatically started hardware wizard	7.1
USB	USB-to-CAN USB-to-CAN compact	via automatically started hardware wizard	7.1
ISA	iPC-I 320 iPC-I 165 PC-I 03	via manually started hardware wizard	7.2
PC/104	iPC-I 320/104 PC-I 04/104	via manually started hardware wizard	7.2
LPT	CANdy CANdy-lite	via IXXAT Interfaces Applet	7.3
TCP/IP	CAN@net	via IXXAT Interfaces Applet	7.4

7.1 Installation of PCI-, USB-or PCMCIA-Interfaces

 Installing the new IXXAT hardware is made easier under Windows if you install the VCI-Software before you install the IXXAT CAN-Hardware. The driver is then found automatically and does not have to be copied from an external data medium.

If no VCI-Software has been installed, you should make sure that you have the IXXAT installation-CD to hand.

Installation is carried out via the automatically started Hardware Wizard, which detects the newly installed card.

- (1) Install your PC/CAN-interface in the computer, or insert the tinCAN into the PCMCIA slot, or connect the USB-to-CAN adapter to your USB-port. For this, also observe any instructions in the hardware manuals.
- (2) When Windows2000 is first booted after the installation of the PCI-card or after inserting the tinCAN (or the USB-to-CAN), the hardware wizard is

automatically started. The following dialog appears, which you confirm with "Next".

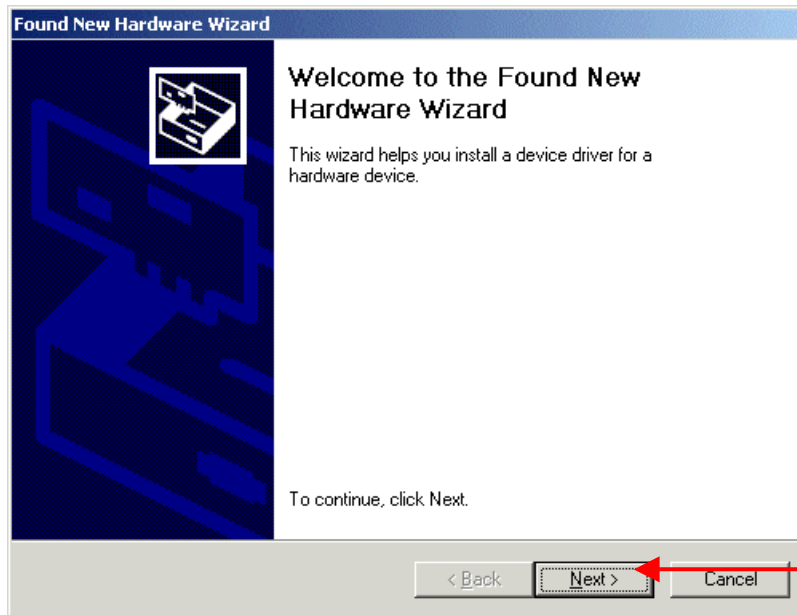


Figure 7.1-1: New hardware component found

- (3) A driver must be installed for the PC/CAN-interface card which has been found. If the VCI or the driver has already been installed, Windows detects this and skips points (4) and (5).

If the VCI driver has not yet been installed, Windows asks for the requested method to search for it. Mark the search for the best driver for the device and continue with "Next".

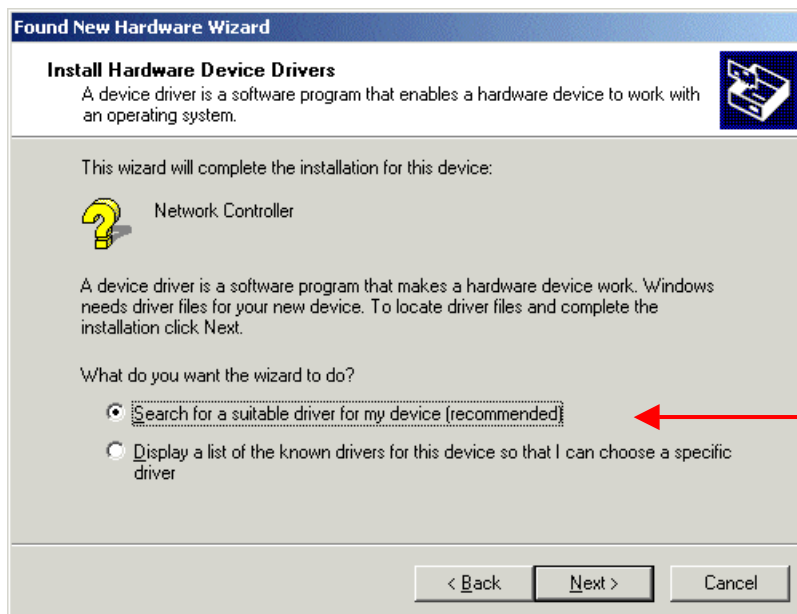


Figure 7.1-2: Procedure for driver search

(4) Insert the IXXAT installation-CD.

 If installing the driver from the IXXAT installation-CD, you must enter the explicit driver position.

 **By marking the "CD-ROM"-button it may happen that the driver for Win95/98 is found! Therefore do not mark the "CD-ROM"-button!**

Continue with "Next".

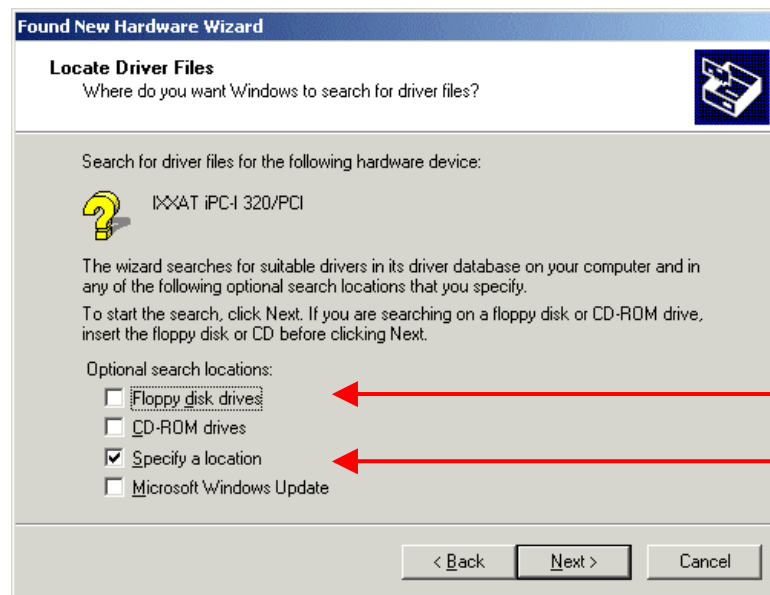



Figure 7.1-3: Entering the search drives

(5) Entering the drive position

 When installing the driver from the IXXAT installation-CD, enter the directory Drivers\Win2000 on the installation CD as driver position.

Start the search for the driver with "OK".



Figure 7.1-4: Entering the driver position

- (6) Windows finds a driver for the new PC/CAN-interface and the following dialog appears (here for the iPC-I 320/PCI):

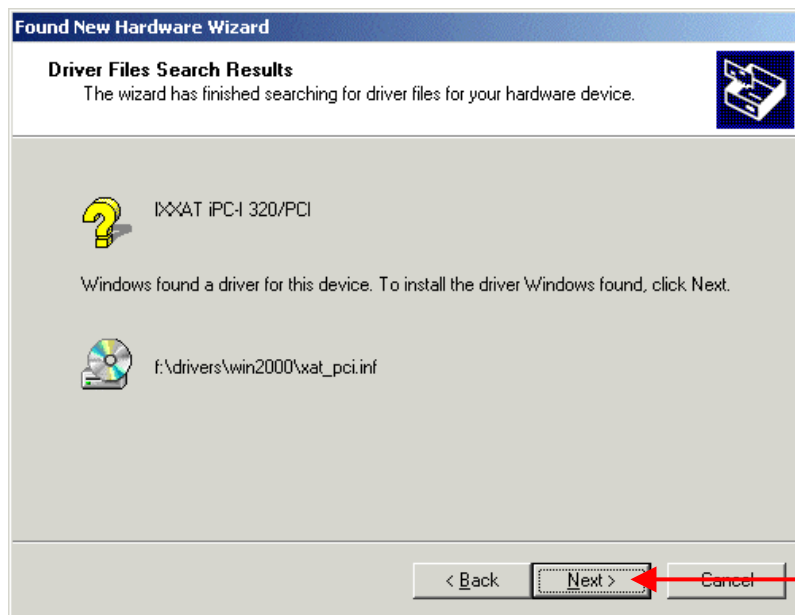


Figure 7.1-5: Driver found

Acknowledge the dialog with "Next".

- (7) Windows now copies the driver found and signals success with a last dialog. Conclude the installation by clicking on the "Finish" button.

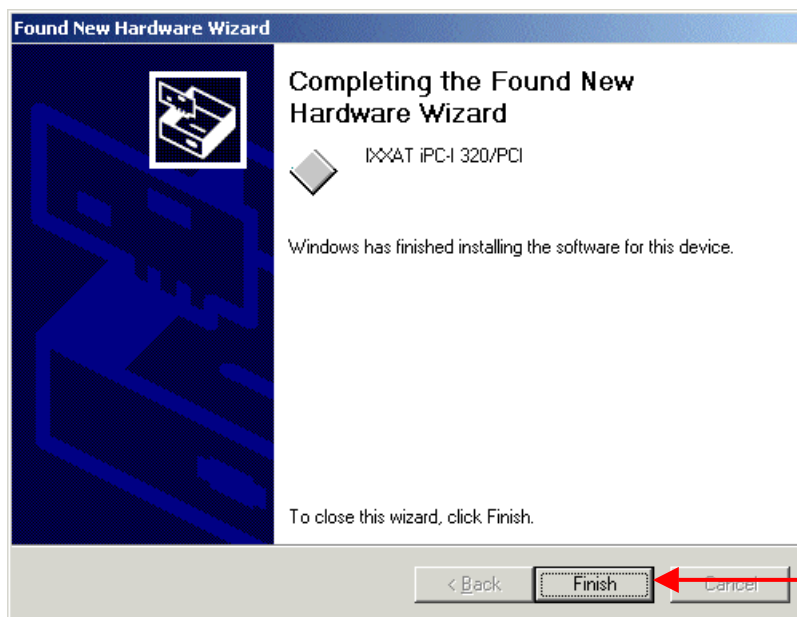


Figure 7.1-6: Installation successful

After successful installation of the PCI-driver, and provided the VCI-driver software is already installed, the card (here iPC-I 320/PCI) is visible in the Control Panel Applet IXXAT Interfaces and ready for use.

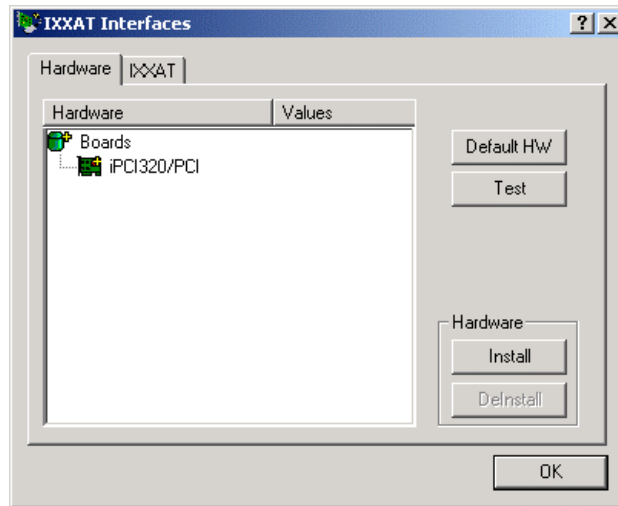


Figure 7.1-7: iPC-I 320/PCI installed

7.2 Installation of ISA-cards

Before installing an ISA-card, it is absolutely essential to first find a free address space in the working memory and a free IRQ. For this, open the "System Informations" (Accessories|System Tools) and search for a free address space and a free IRQ under "Hardware Resources".



The address settings on the card are made by means of 16-bit DOS segment addresses (e.g. D200) which are also described this way in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing rather than addressing the memory in a linear way. Therefore the board's segment address (e.g. D200...D3FF) is declared as linear address under Windows (e.g. D2000...D3FFF).

The free address and the IRQ found are then set on the card by means of jumpers and dipswitches (see hardware manual). The IRQ is to be reserved in the Bios for ISA-cards.



Installing the new IXXAT hardware is made easier under Windows if you install the VCI-Software before you install the IXXAT CAN-Hardware. The driver is then found automatically and does not have to be copied from an external data medium.

6.2.1 Installation

- (1) Start the Hardware Wizard.

This is found in the Start menu under "Control Panel"

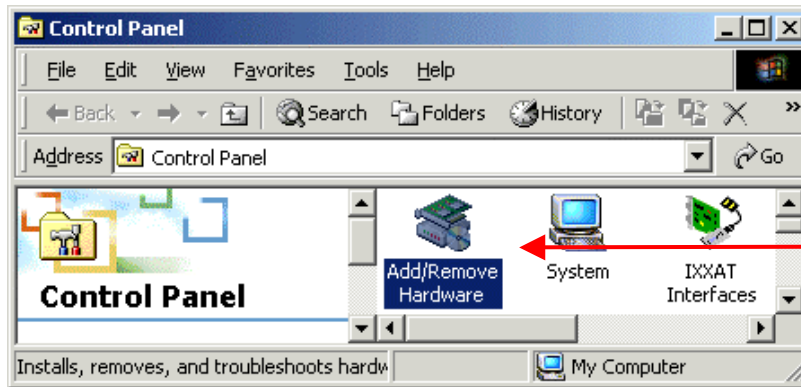


Figure 7.2-1: Starting the hardware wizard

- (2) The welcome dialog of the Hardware Wizard appears. Acknowledge this with the "Next"-button.



Figure 7.2-2: The started Hardware Wizard

- (3) Mark the button for installing new hardware and acknowledge the dialog with the "Next"-button.

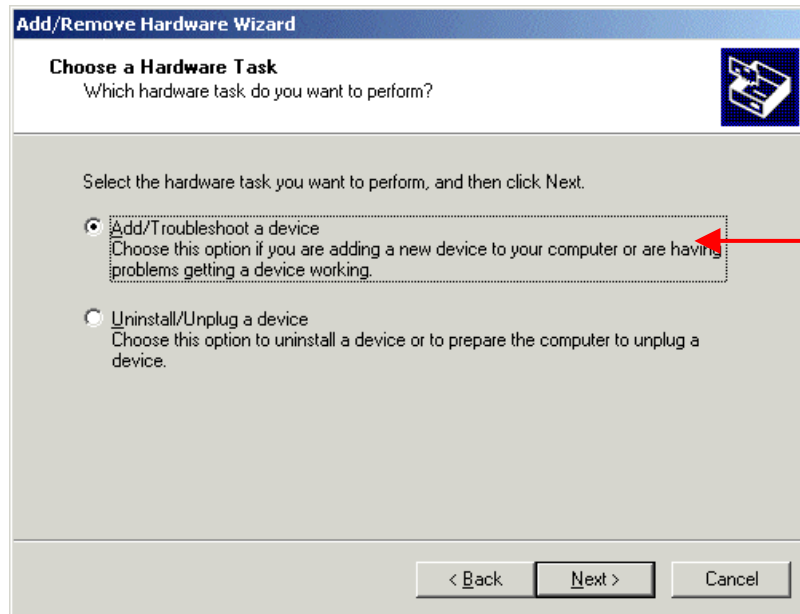


Figure 7.2-3: Selection of the Wizard task

- (4) The Hardware Wizard lists all hardware already installed. Select the entry to add a new device and continue with the "Next" button.

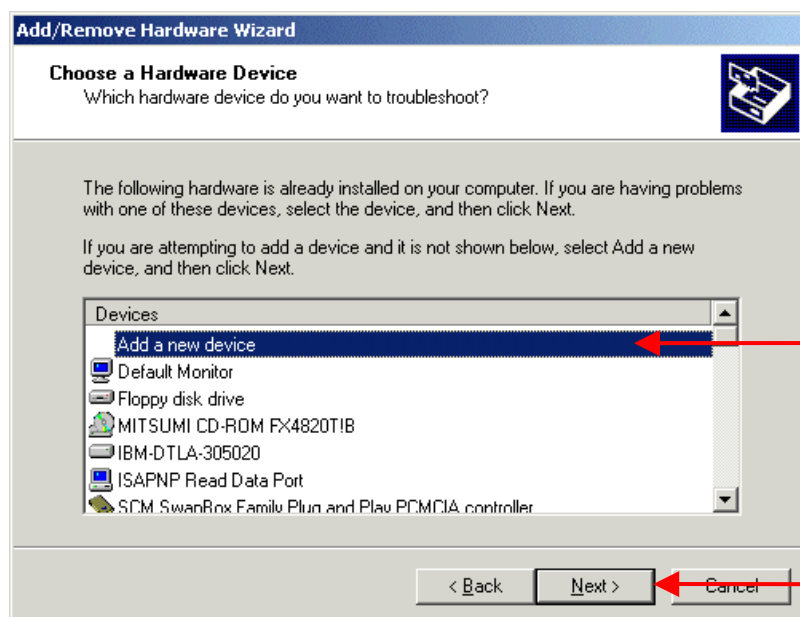


Figure 7.2-4: Selection for installing new hardware

- (5) The Hardware Wizard asks whether further hardware should be searched for. This is not the case. Continue with the "Next"-button.

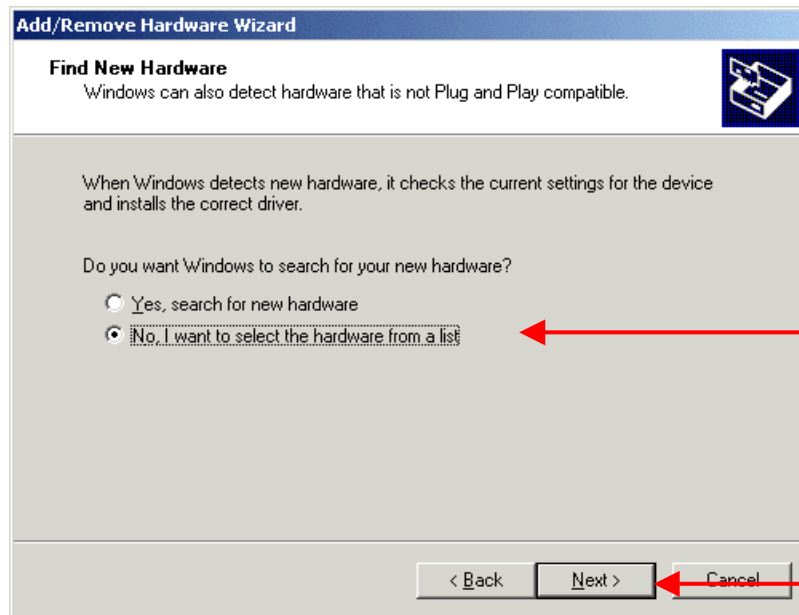


Figure 7.2-5: Do not search for hardware

- (6) If the VCI-software was already installed before the hardware installation, you can select "IXXAT CAN-interfaces" in the list of the known hardware types and continue with point (9) via the "Next" button. If this is not the case, select "Other devices" and continue with the "Next"-button.

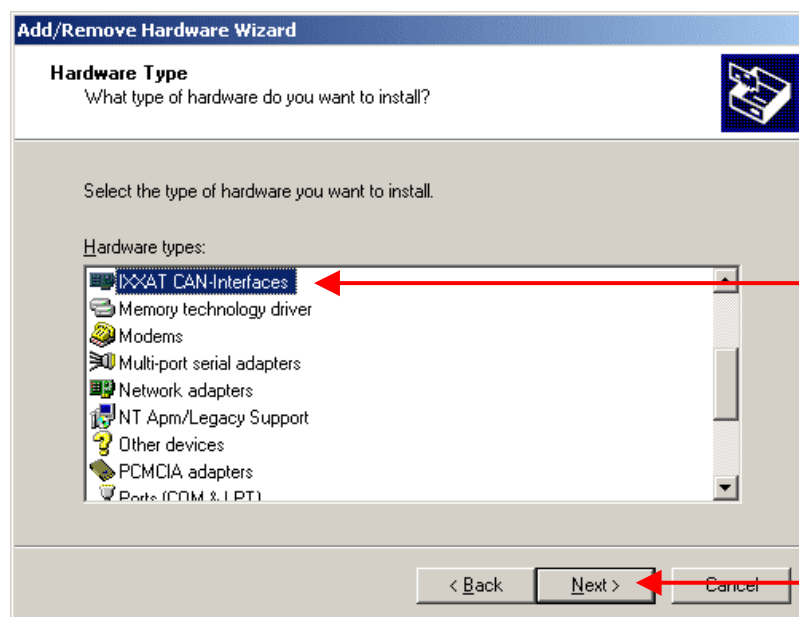


Figure 7.2-6: Selection of the hardware type

- (7) The Hardware Wizard now offers you a list of hardware manufacturers and their models. However, since you have a driver CD, click on the "Have Disk" button without selecting a certain manufacturer.

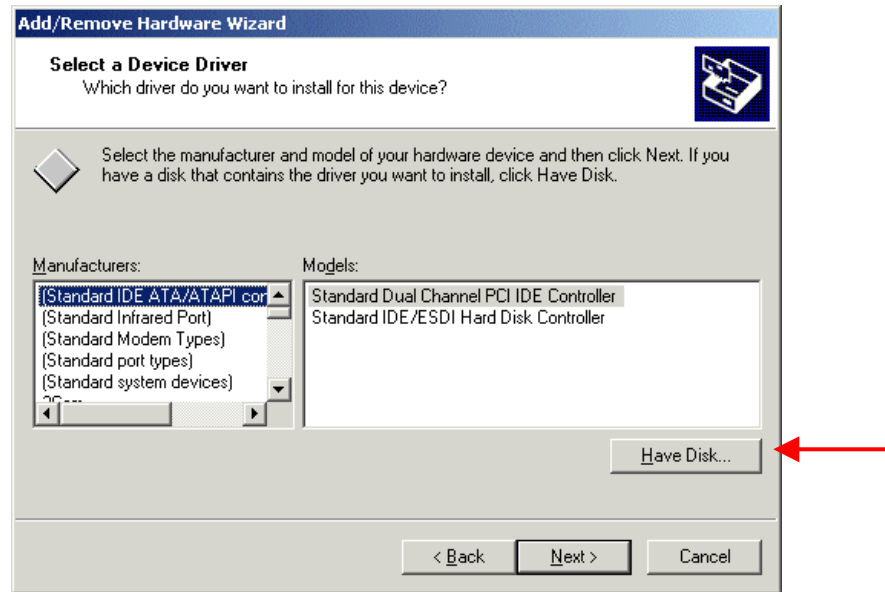


Figure 7.2-7: List of hardware manufacturers

(8) Insert data medium with INF-file:



Insert the IXXAT installation-CD and enter the CD-ROM drive as source. The required .inf files can be found in the directory Drivers\Win2000.

Start copying with "OK".

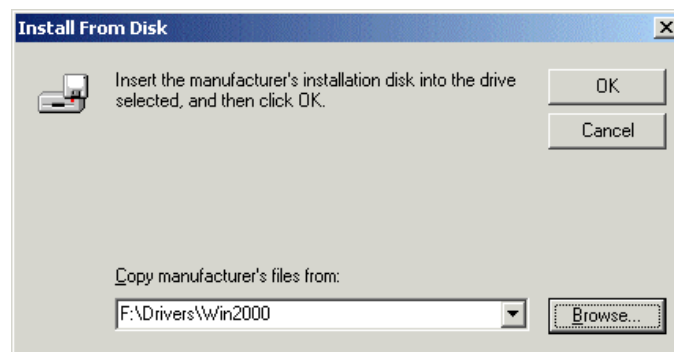


Figure 7.2-8: Request for diskette

(9) The hardware wizard now provides a selection of drivers. You select your PC/CAN-interface and continue the installation with "Next".

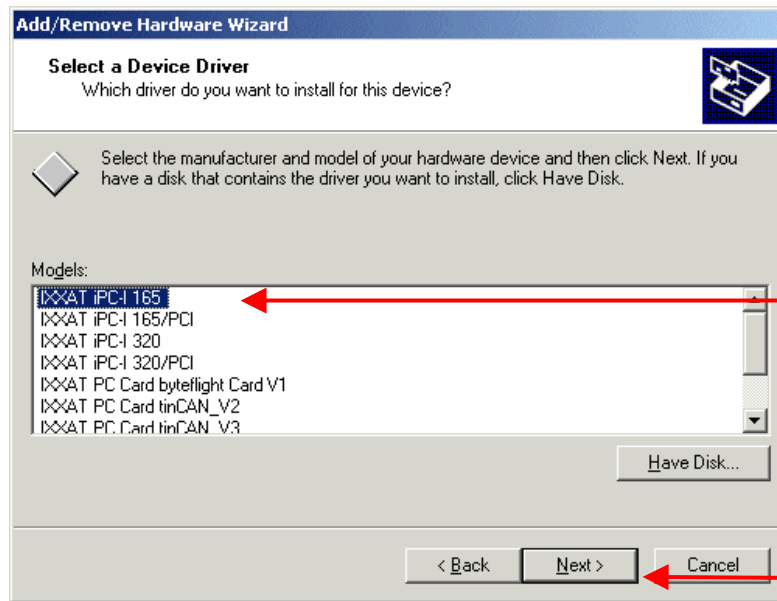


Figure 7.2-9: Selection of the driver to be installed



Our PC/104 interfaces are identical to the appropriate versions for the ISA bus. Therefore select model iPC-I 320 for installation of a iPC-I 320/104 interface or model PC-I 03 for installation of a PC-I 04/104 interface.

The selected driver is then installed. This may take some time!

- (10) Windows has now installed the PC/CAN-interfaces with default settings. If these do not match the Address and IRQ set by you on the hardware, you can alter them later in the hardware settings (see Section 7.2.1). However, you must first accept the recommended settings and go on with "Next".

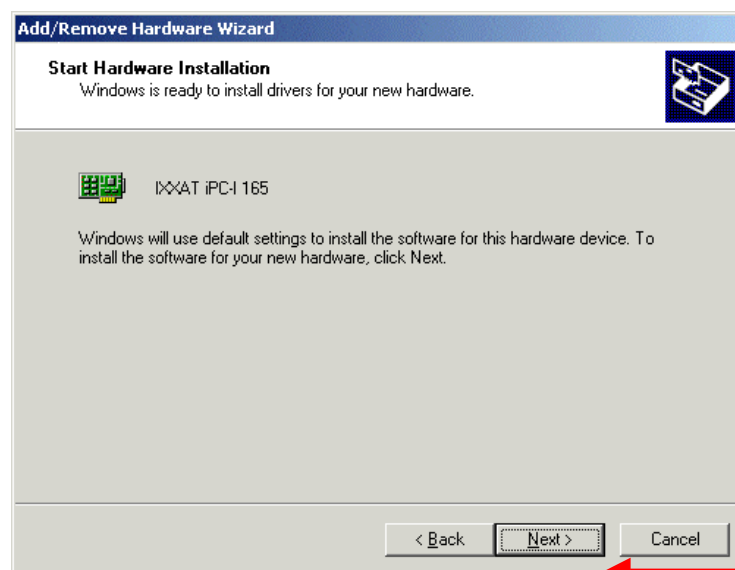


Figure 7.2-10: Default settings

- (11) Installation of the new component is now complete and can be ended with "Finish".

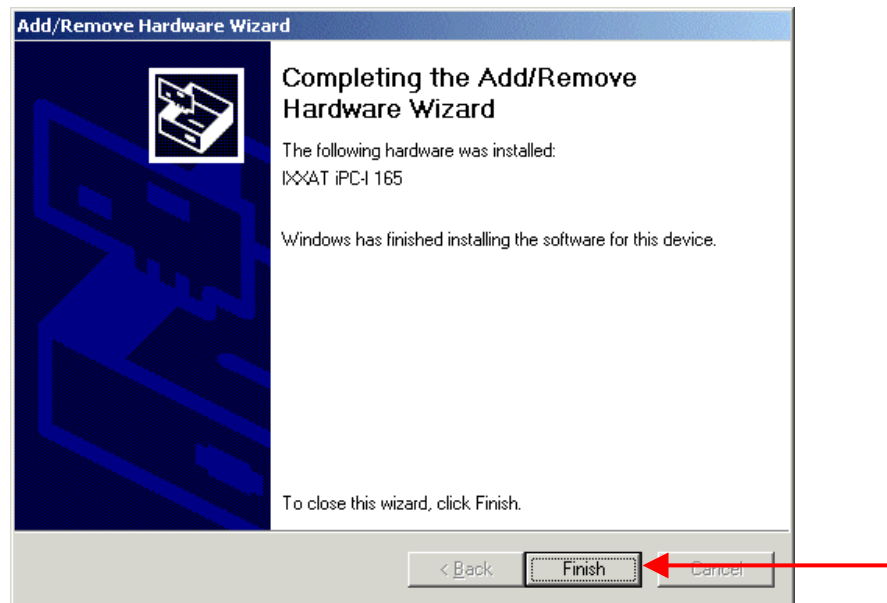


Figure 7.2-11: Installation finished

Windows now asks you to restart the computer.



If the recommended settings do not match the values set on the card (check in the Device Manager if necessary), you should adjust these before restarting. Please read Section 7.2.1 for this.

7.2.1 Changing the Default settings

An ISA-card is always installed by the hardware wizard with the default settings (address and IRQ). If these do not correspond to the values set on the card via jumpers and dipswitches, they must be altered as described in this section.

- (1) Start the "System"-Applet in the Control Panel.

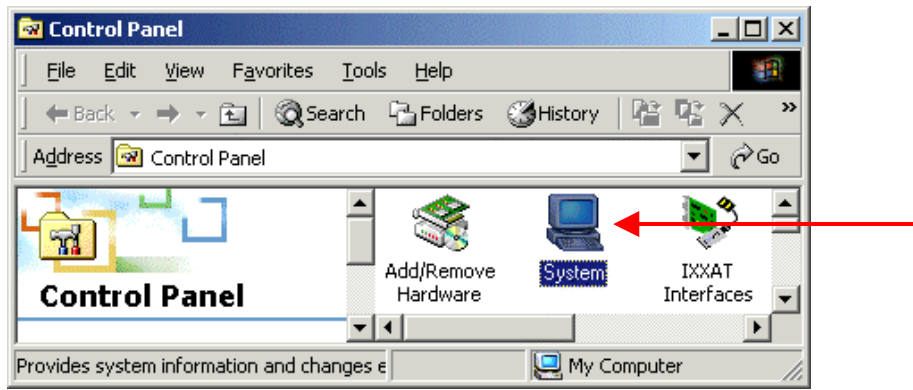


Figure 7.2-12: Starting the System Applet

- (2) Start the Device Manager via the “Device Manager” button.

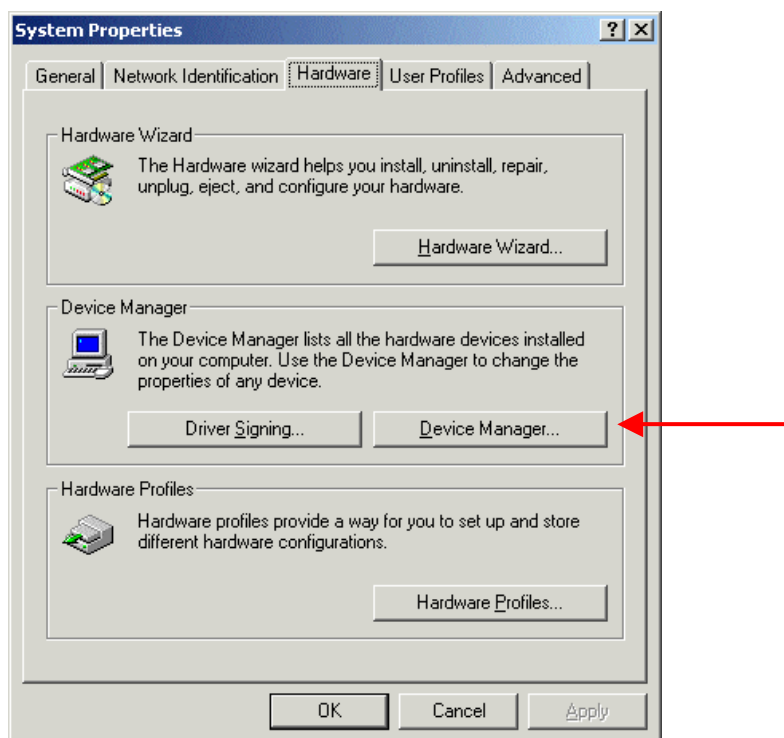


Figure 7.2-13: Starting the Device Manager

- (3) Select the installed PC/CAN-interface in the Device Manager.
Open the properties of the PC/CAN-interface whose settings you wish to change.

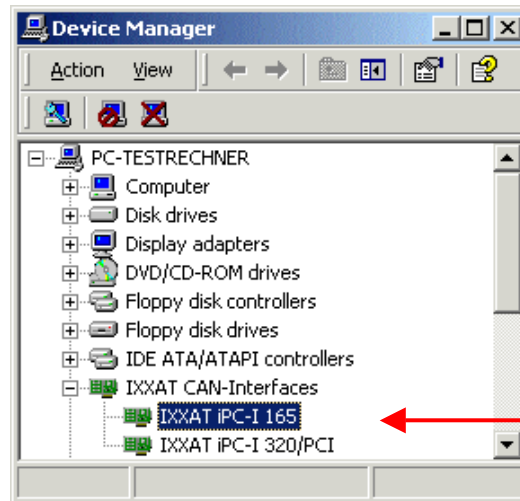


Figure 7.2-14: The Device Manager

(4) Changing the settings:

If you now switch to the "Resources" tab in the hardware properties dialog, you will see the settings entered by Windows during the installation.

According to the settings made by you on the PC/CAN-interface for Address and Interrupt, you must adjust the Resource settings here.

Your alterations are adopted with "OK".

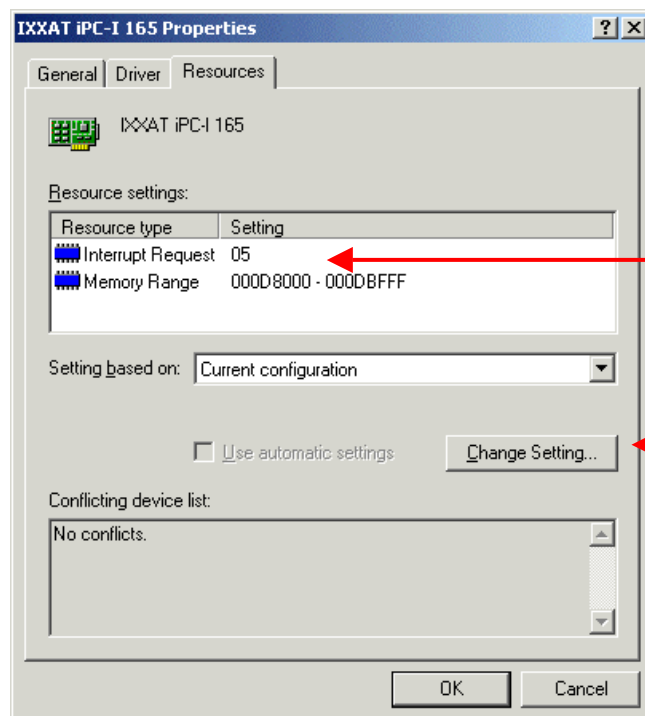


Figure 7.2-15: Changing the PC/CAN-interface settings

7.3 Installation of CANDy and CANDy lite



CANDy / CANDy lite has to be connected to the LPT-Port and the power supply before booting the machine.

7.3.1 Enabling LPT-Port Interrupts

CANDy and CANDy lite need the LPT-Port interrupt. This interrupt is disabled under Windows 2000 by default. At first the user has to enable the interrupt manually:

- (1) Start the "System"-Applet in the Control Panel.

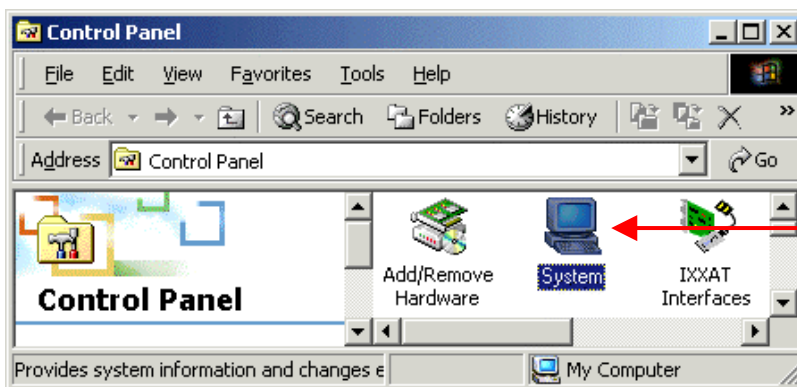


Figure 7.3-1: Starting the System Applet

- (2) Start the Device Manager via the "Device Manager" button.

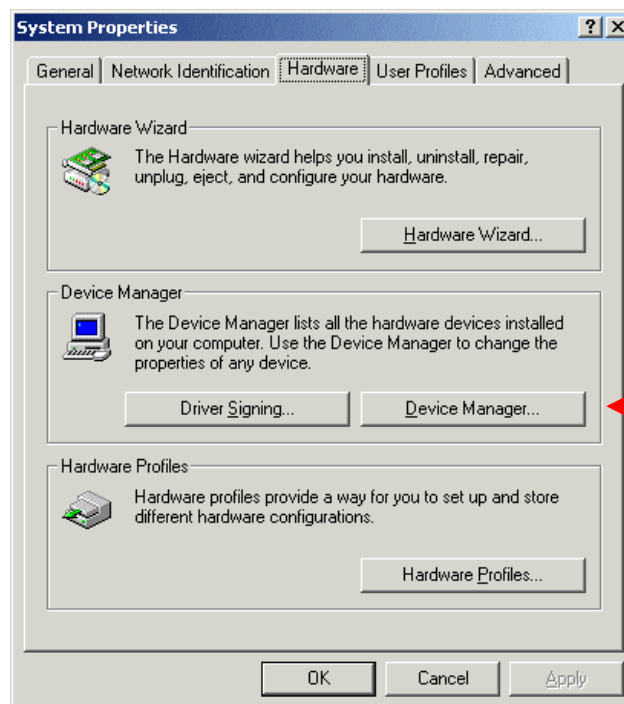


Figure 7.3-2: Starting the Device Manager

- (3) Select the LPT-Port where CANDy / CANDy lite is connected to.

Double-click on it.

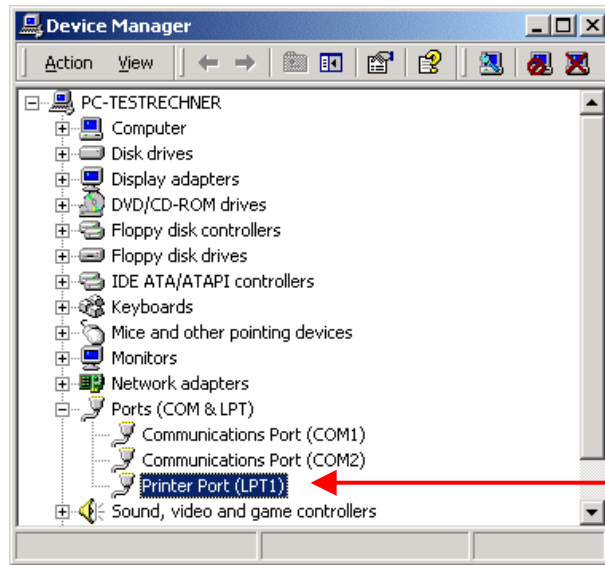


Figure 7.3-3: The Device Manager

(4) Enable interrupt for the LPT-Port:

If you switch to the "Port Settings" tab in the hardware properties dialog, you will see the settings entered by Windows. Select „Use any interrupt assigned to the port“ and adopt the modification with "OK".

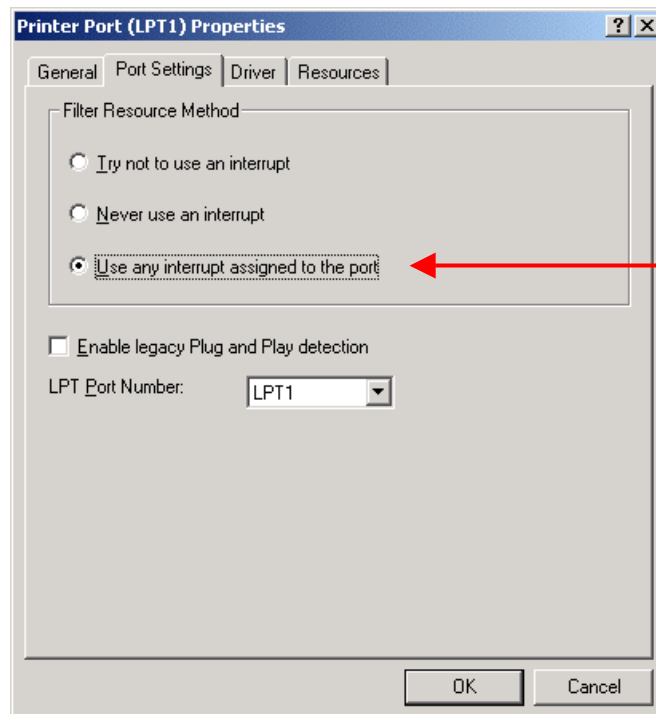


Figure 7.3-4: Changing the LPT-Port settings



If LPT-Port Bios settings are not running for CANDy or CANDy lite after installation you will have to modify them. After re-

booting the machine Windows 2000 may have reset the LPT-Port Device Manager settings to default values. Therefore check Device Manager settings after modifications on Bios settings.

7.3.2 Installation

CANdy and CANdy lite are installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.

- (1) Start the IXXAT Interfaces Applet in the Control Panel.

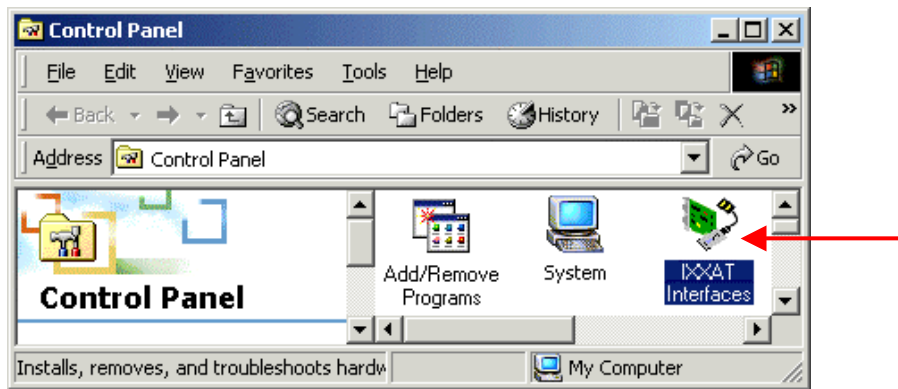


Figure 7.3-5: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the Applet in order to install new hardware.

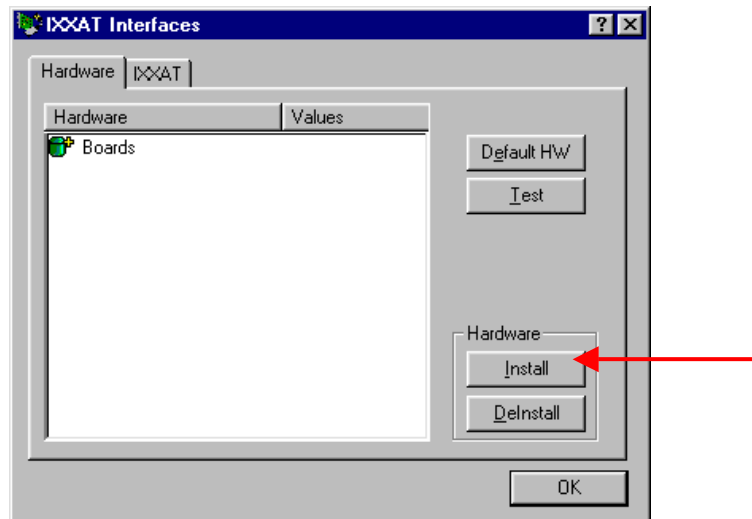


Figure 7.3-6: IXXAT Interfaces Applet

- (3) Select "IXXAT CANdy Install". A dialog appears, where adapter type and port number must be selected. In addition, the address and IRQ of the chosen parallel port are displayed.

Select the type of parallel port CAN-interface to be installed (CANdy, CANdy lite).

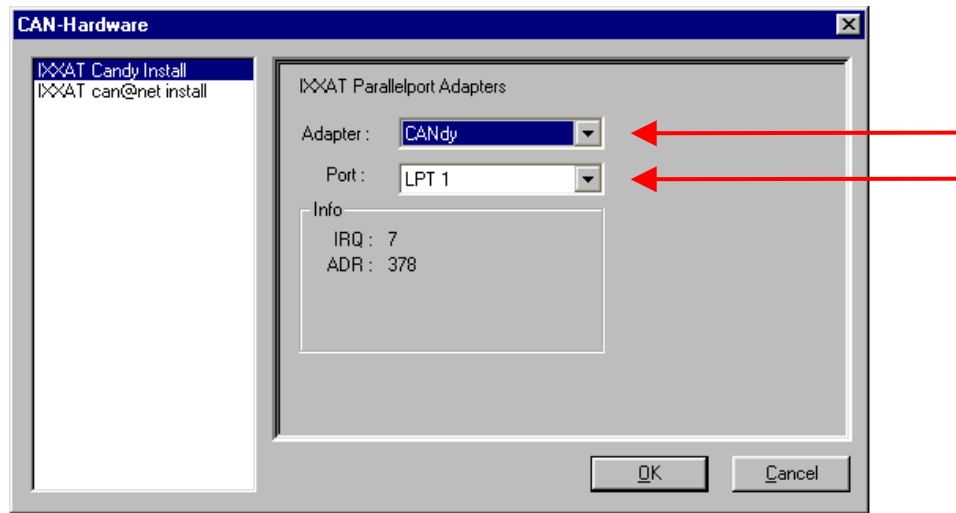


Figure 7.3-7: Installation of a parallel port CAN-interface

- (4) Select the parallel port of the connected CAN-interface.
- (5) End the installation by clicking on "OK".
- (6) The main window of the IXXAT Interfaces Applet now shows the CANdy installed in the above example.

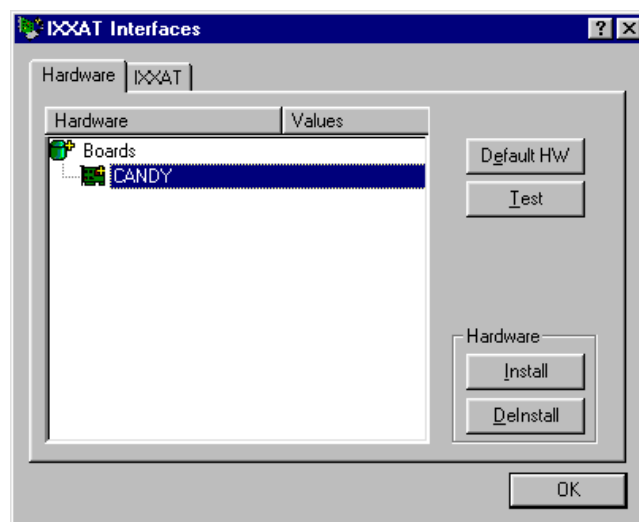


Figure 7.3-8: The Applet after installation of a CANDy

- (7) Select the CANDy / CANDy lite and press the "Test" button to test the access to the device.

7.4 Installation of CAN@net

CAN@net is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.



If you already worked with CAN@net and older versions of VCI perhaps you want to reuse the existing CAN@net configurations (symbolic name, IP address and password). Therefore move the file `xatcn_nt.ini` into the directory `C:\Windows\system`. Such a file was created in the application directory of each application that used CAN@net. After the next startup of IXXAT Interfaces applet your previous CAN@net configurations will be available.

- (1) Start the IXXAT Interfaces Applet in the Control Panel.

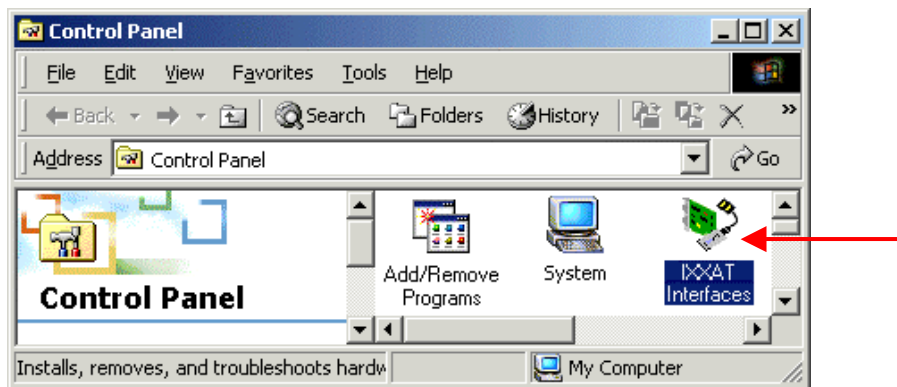


Figure 7.4-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the applet in order to install new hardware.

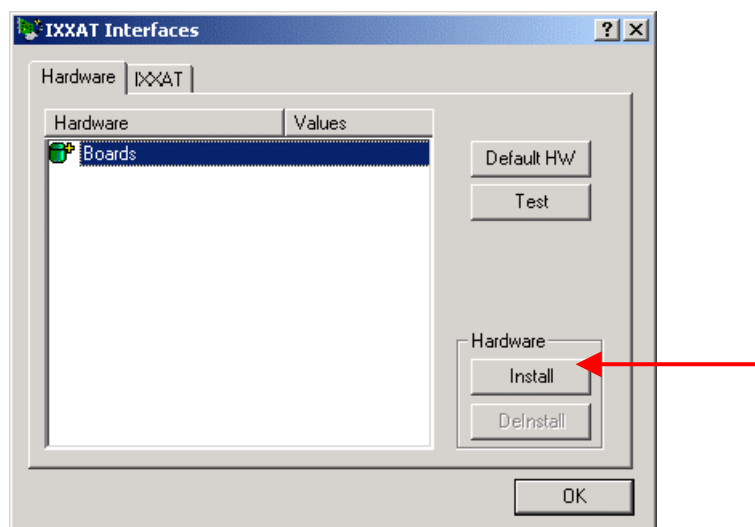


Figure 7.4-2: IXXAT Interfaces Applet

- (3) A CAN@net installation dialog appears after selecting "IXXAT CAN@net Install". Create a new configuration by clicking the "Add" button.

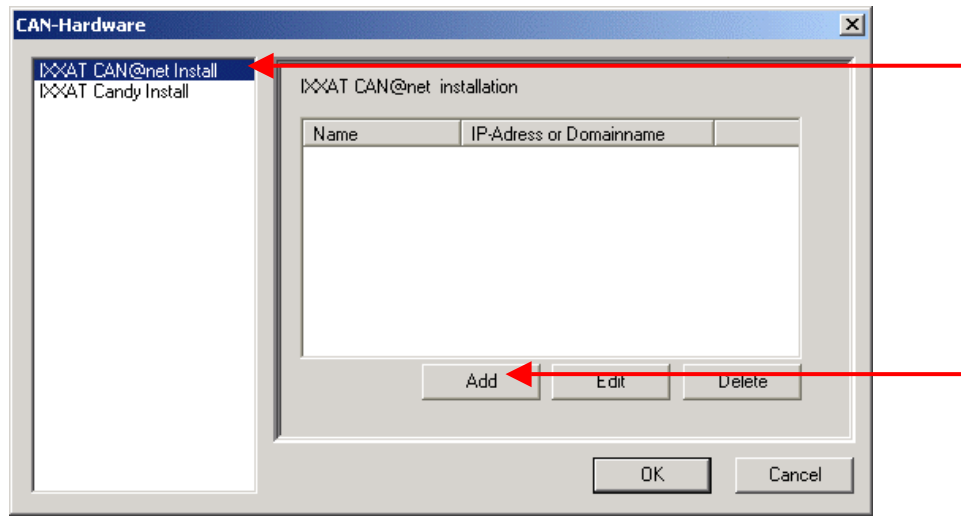


Figure 7.4-3: Installation of CAN@net

- (4) Define a symbolic name, the IP address and the password. If there is a DNS entry for the CAN@net device you may alternatively type in a domainname instead of the IP address. The default password at delivery time is "lxxat".

In the Description field you may input additional userdefined description text. Add new text lines with Ctrl+Enter.

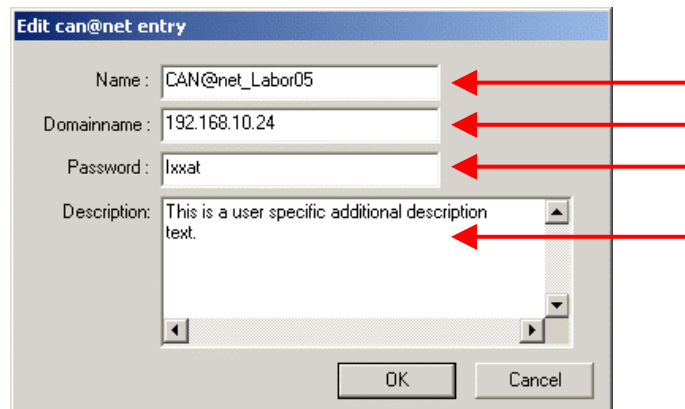


Figure 7.4-4: New CAN@net configuration

! IP address and password are configurable via RS232 connector of the CAN@net interface (refer CAN@net Hardware Manual).

- (5) The new configuration appears within the installation dialog. Clicking the "OK" button will set up a CAN@net device based on the selected configuration.

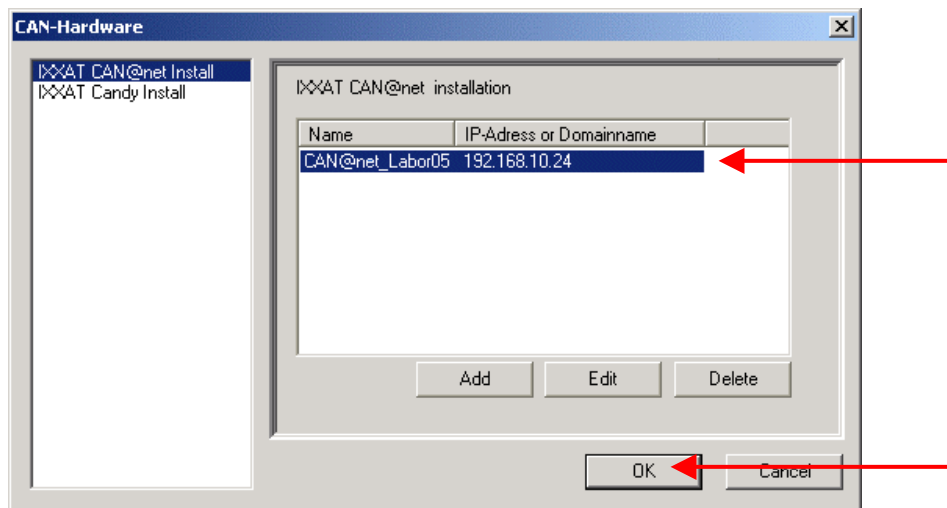


Figure 7.4-5: Installation dialog with new CAN@net configuration

If there is more than one configuration defined you can use another device by selecting another configuration. Existing configurations can be edited via the "Edit" button and deleted via the "Delete" button.

- (6) The set up CAN@net device now appears in the main window of the IXXAT Interfaces applet. If the configured IP address and password is correct the access test via the "Test" button can be performed.

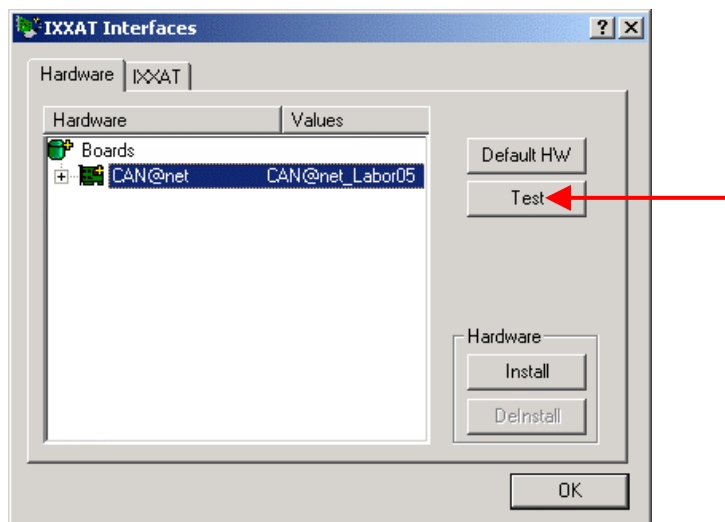


Figure 7.4-6: Applet after installation of the CAN@net interface

8 Hardware installation WindowsXP

 Under Windows XP the user must be logged in with administrator authorization in order to carry out new hardware installation.

Hardware type		Installation method	Section
PCI	iPC-I 320/PCI iPC-I 165/PCI PC-I 04/PCI	via automatically started hardware wizard	8.1
PCMCIA	tinCAN byteflight CARD	via automatically started hardware wizard	8.1
USB	USB-to-CAN USB-to-CAN compact	via automatically started hardware wizard	8.1
ISA	iPC-I 320 iPC-I 165 PC-I 03	via manually started hardware wizard	8.2
PC/104	iPC-I 320/104 PC-I 04/104	via manually started hardware wizard	8.2
LPT	CANdy CANdy-lite	via IXXAT Interfaces Applet	8.3
TCP/IP	CAN@net	via IXXAT Interfaces Applet	8.4

8.1 Installation of PCI-, USB- or PCMCIA-Interfaces

 If you are working with Windows XP you have to install the VCI-Software before you install the IXXAT CAN-Hardware.

Installation is carried out via the automatically started Hardware Wizard, which detects the newly installed card.

- (1) Install your PC/CAN-interface in the computer, or insert the tinCAN into the PCMCIA slot, or connect the USB-to-CAN adapter to your USB-port. For this, also observe any instructions in the hardware manuals.
- (2) When Windows XP is first booted after the installation of the PCI-card or after inserting the tinCAN (or the USB-to-CAN), the hardware wizard is automatically started. The following dialog appears, which you confirm with "Next".

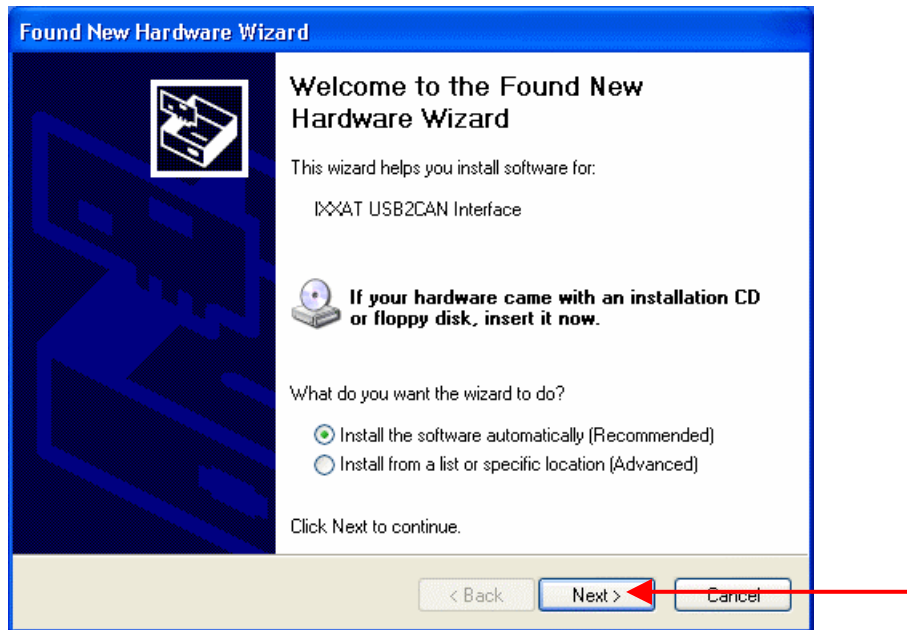


Figure 8.1-1: New USB-to-CAN device found

- (3) Windows automatically finds a driver for the detected PC/CAN-Interface and shows the following dialog (here for a USB-to-CAN device):

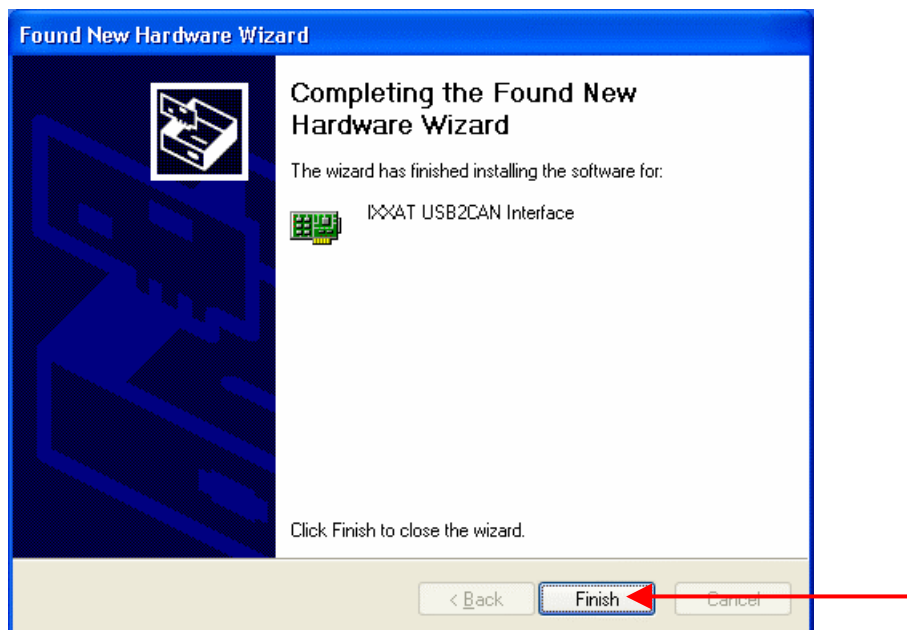


Figure 8.1-2: Driver found

Conclude the installation by clicking on the "Finish" button.

After successful installation of the driver the card (here USB-to-CAN) is visible in the Control Panel Applet IXXAT Interfaces and ready for use.

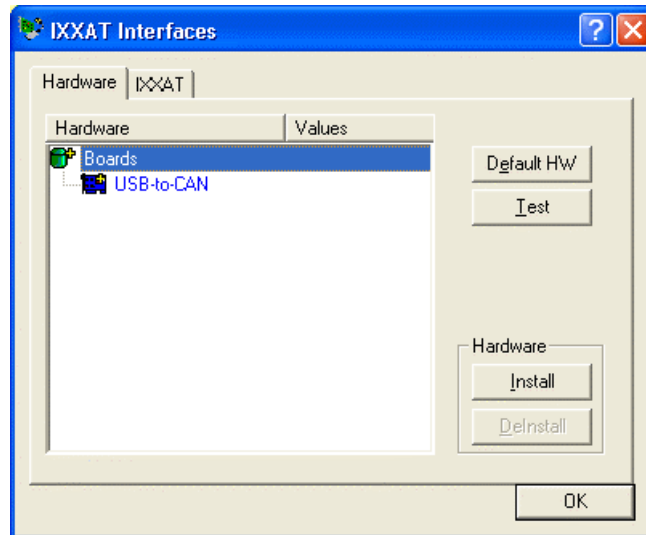


Figure 8.1-3: USB-to-CAN ready for use

8.2 Installation of ISA-cards

! If you are working with Windows XP you have to install the VCI-Software before you install the IXXAT CAN-Hardware.

Before installing an ISA-card, it is absolutely essential to first find a free address space in the working memory and a free IRQ. For this, open the "System Informations" (Accessories|System Tools) and search for a free memory address space and a free IRQ under "Hardware Resources".

★ The address settings on the card are made by means of 16-bit DOS segment addresses (e.g. D200) which are also described this way in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing rather than addressing the memory in a linear way. Therefore the board's segment address (e.g. D200...D3FF) is declared as a linear address under Windows (e.g. D2000...D3FFF).

The free address and the IRQ found are then set on the card by means of jumpers and dipswitches (see hardware manual). After that install the CAN card into your PC.

The IRQ is to be reserved in the Bios for ISA-cards.

8.2.1 *Installation*

- (1) Open the category "Printers and Other Hardware" in the Control Panel.

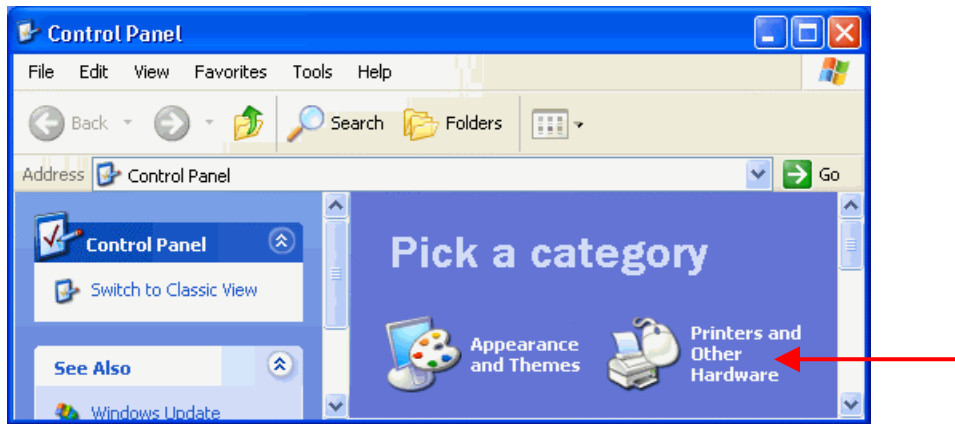


Figure 8.2-1: Opening Control Panel category

- (2) Start the Hardware Wizard via the icon "Add Hardware".

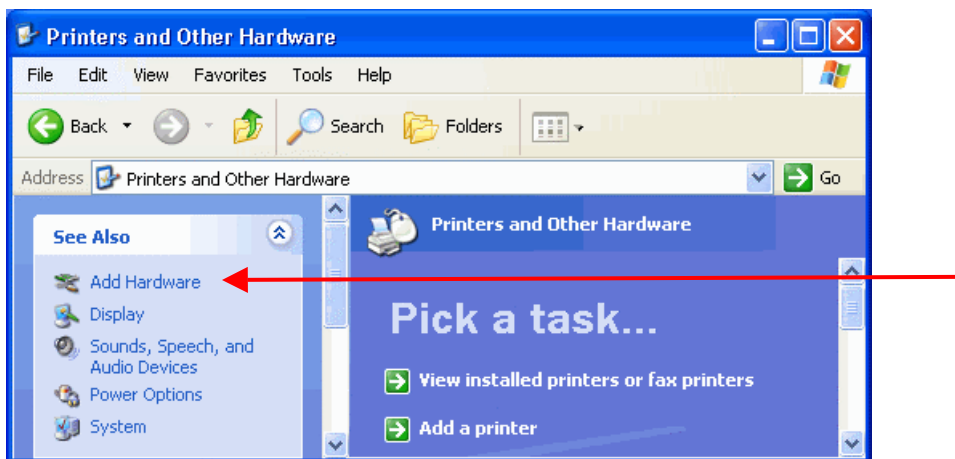


Figure 8.2-2: Starting the hardware wizard

- (3) The welcome dialog of the Hardware Wizard appears. Acknowledge this with the "Next"-button.



Figure 8.2-3: The started Hardware Wizard

- (4) Because the new hardware is already connected you may acknowledge the following dialog with the "Next"-button.

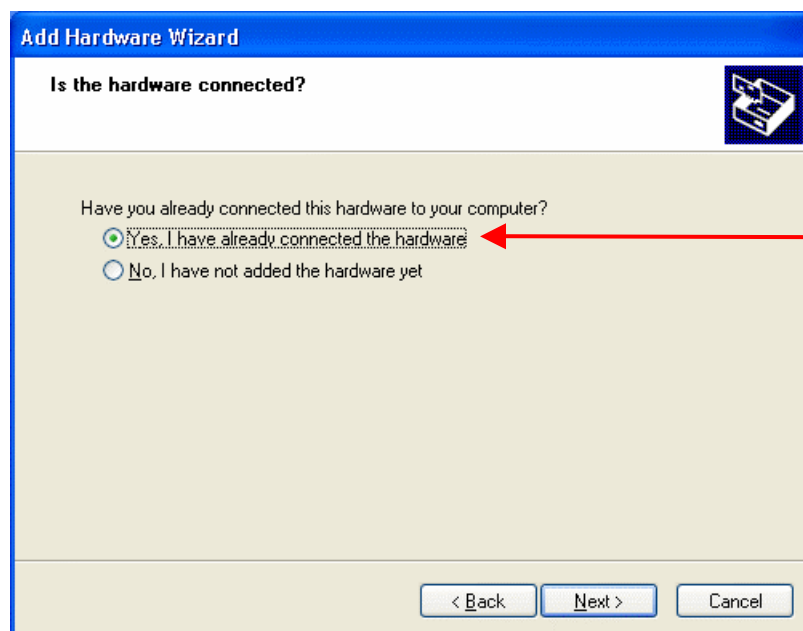


Figure 8.2-4: Selection of the Wizard task

- (5) The Hardware Wizard lists all hardware already installed. Select the entry to add a new device and continue with the "Next" button.

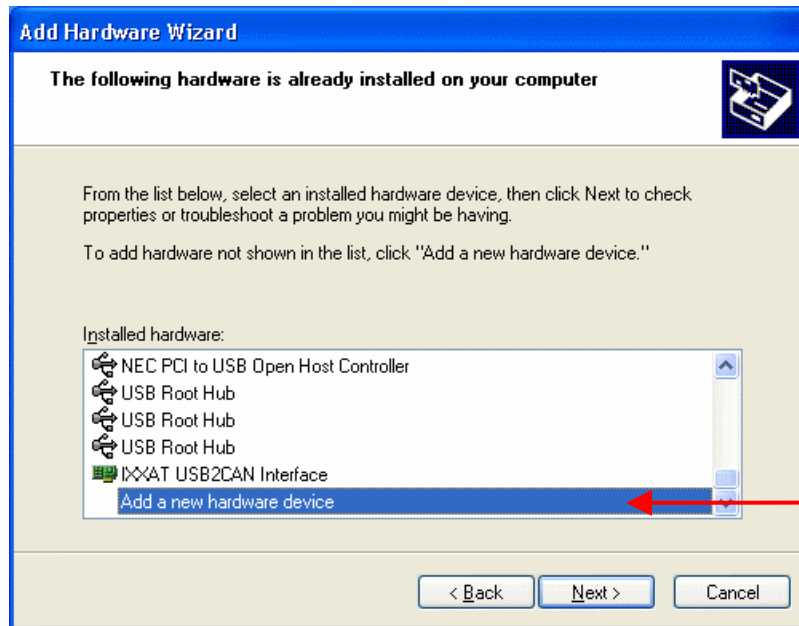


Figure 8.2-5: Selection for installing new hardware

- (6) The Hardware Wizard asks whether hardware should be searched for. This is not the case. Continue with the "Next"-button.

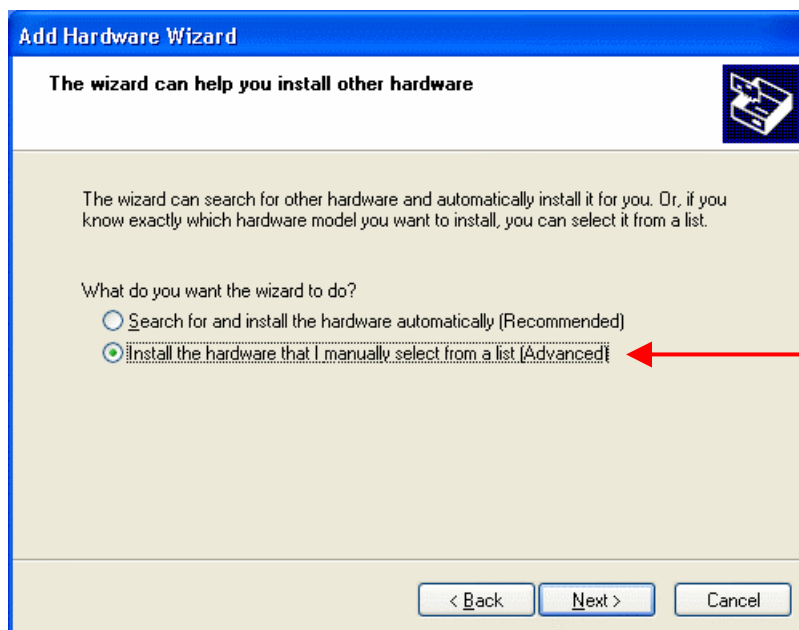


Figure 8.2-6: Manually select hardware from a list

- (7) If the VCI-software was already installed before the hardware installation, you can select "IXXAT CAN-interfaces" in the list of the known hardware types and continue via the "Next" button.

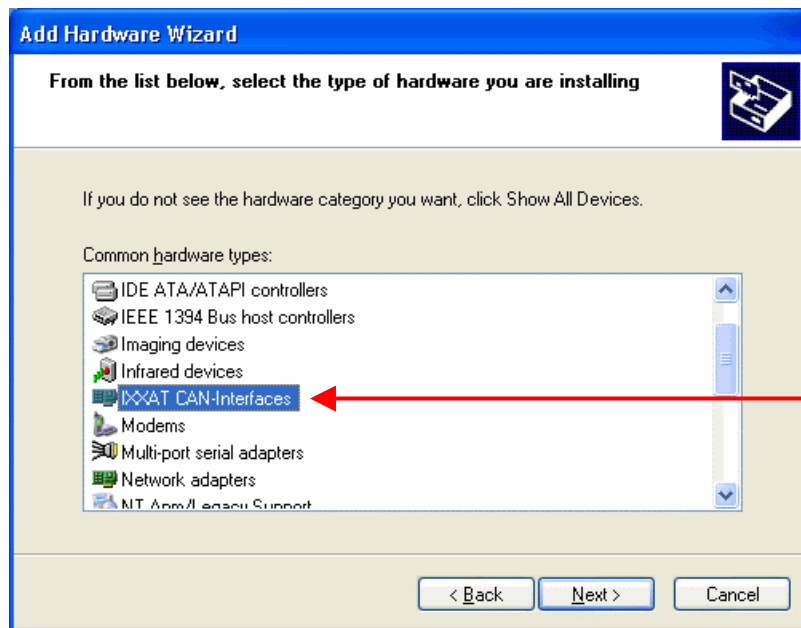


Figure 8.2-7: Selection of the hardware type

- (8) The hardware wizard now provides a selection of drivers. You select your PC/CAN-interface and continue the installation with "Next".

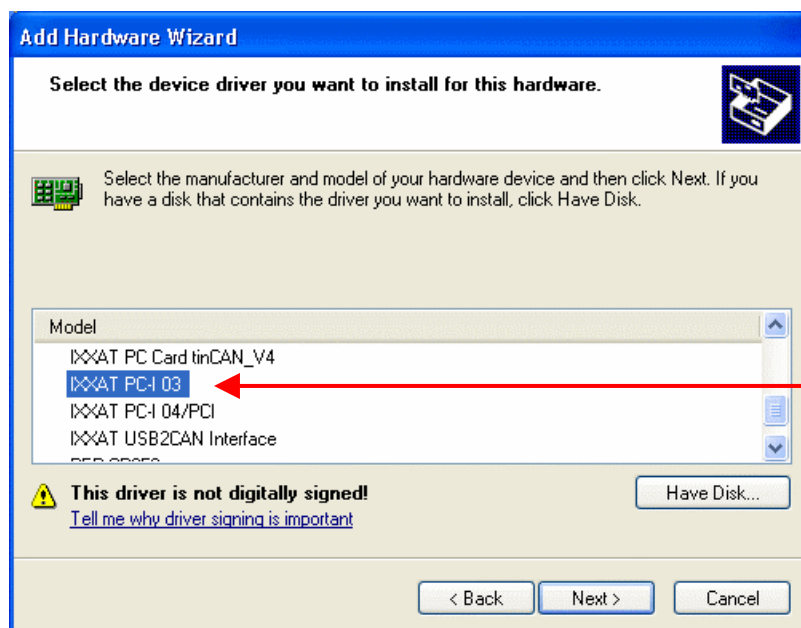


Figure 8.2-8: Selection of the driver to be installed

- ★ Our PC/104 interfaces are identical to the appropriate versions for the ISA bus. Therefore select model iPC-I 320 for installation of a iPC-I 320/104 interface or model PC-I 03 for installation of a PC-I 04/104 interface.

- (9) Windows now confirms your selection what you acknowledge with the "Next" button.

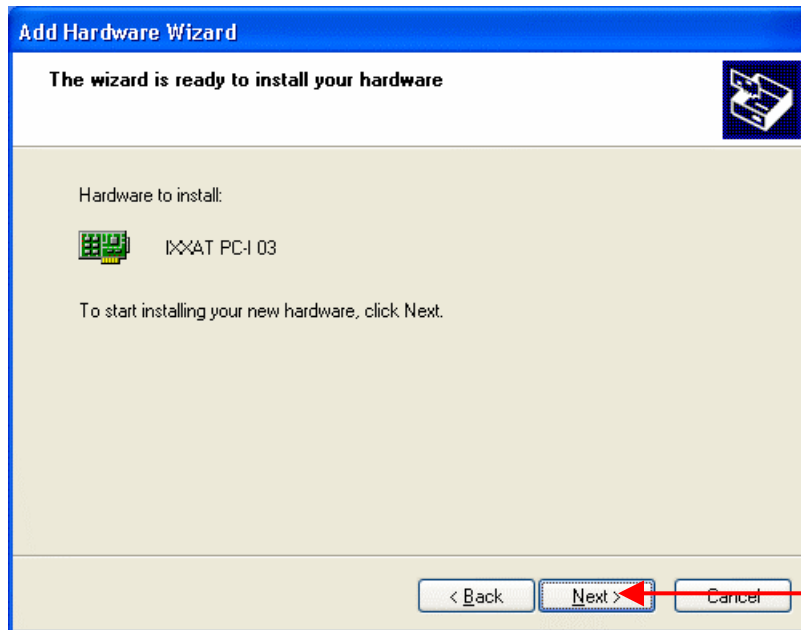


Figure 8.2-9: Selection confirmation



The selected driver is then installed. This may take some time!

- (10) Windows has now installed the PC/CAN-interface with default settings. Click on "View or change resources for this hardware" to adapt this settings to the settings on the board.



Figure 8.2-10: Hardware driver installed

- (11) If the default settings conflict with existing resource configuration Windows will show the following error message. Use the button "Set Configuration Manually" to adapt the settings.

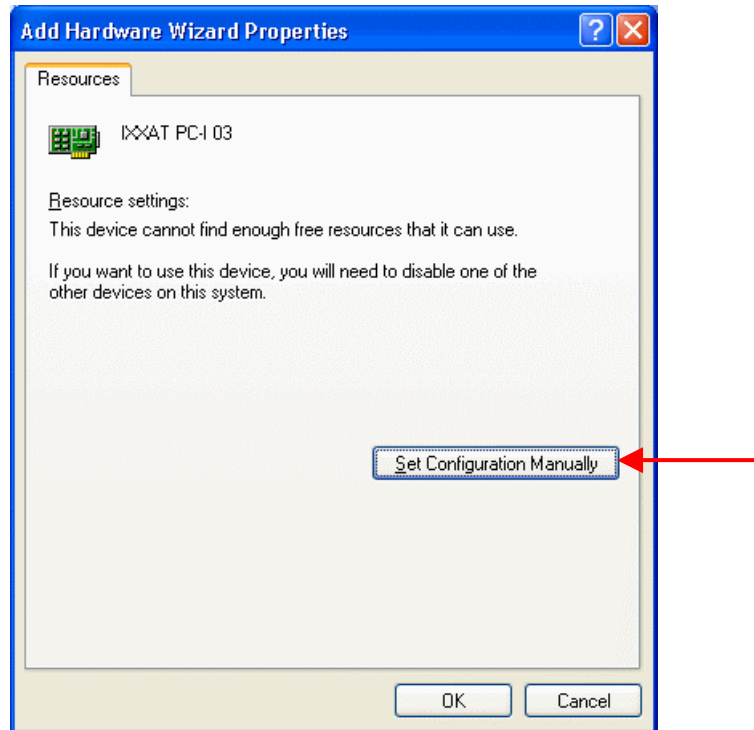


Figure 8.2-11: Notification about resource conflicts

- (12) Changing the settings:

According to the settings made by you on the PC/CAN-interface for address and interrupt, you must adjust the Resource settings here. Your alterations are adopted with "OK".

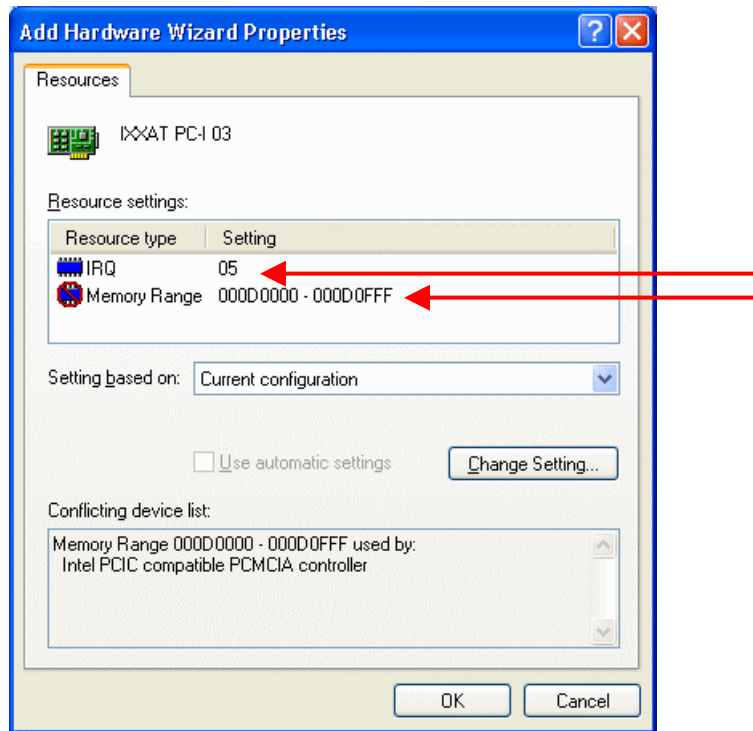


Figure 8.2-12: Adaptation of settings

(13) Conclude the installation with the "Finish" button.

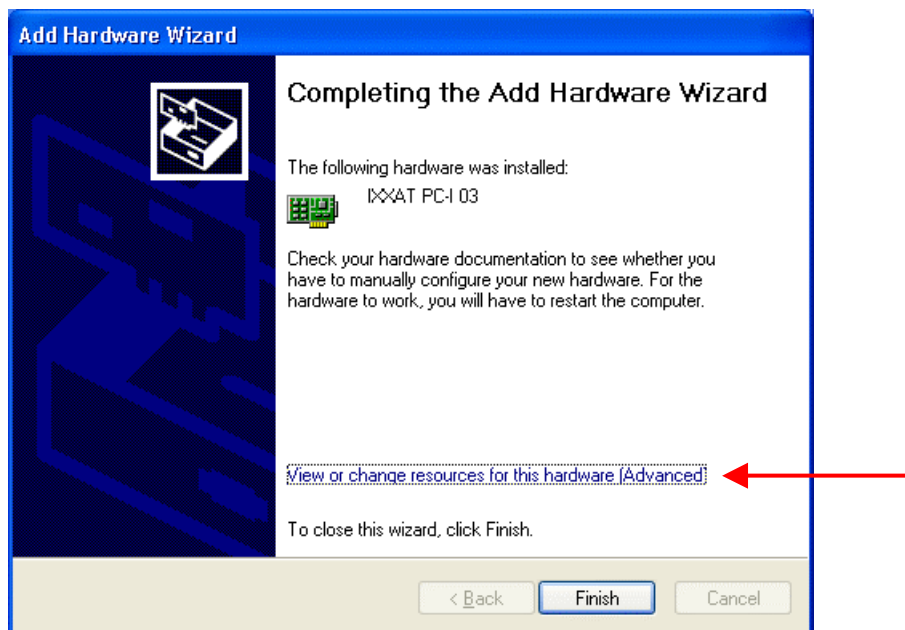


Figure 8.2-13: Installation finished

(14) The installed interface appears in the IXXAT Interfaces Applet and is ready for use. If the configured board address and IRQ was really free on your machine the access test via the button "Test" can be performed.

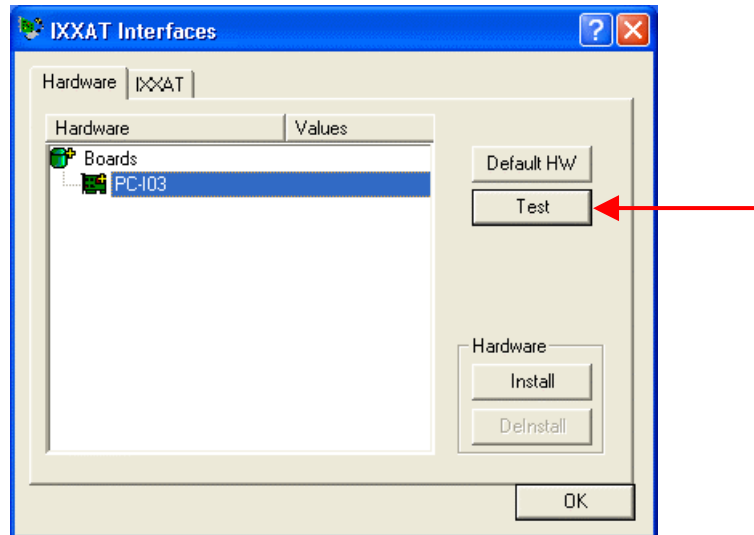


Figure 8.2-14: Test of the installed interface

8.2.2 Changing the settings

In case of a failed access test in the IXXAT Interfaces Applet or resource conflicts with other hardware components you will have to modify the settings for address and/or IRQ as described in this chapter. Of course the new settings have to be done on the board itself and in the bios before.

- (1) Start the applet "System" within the Control Panel category "Printers and Other Hardware".

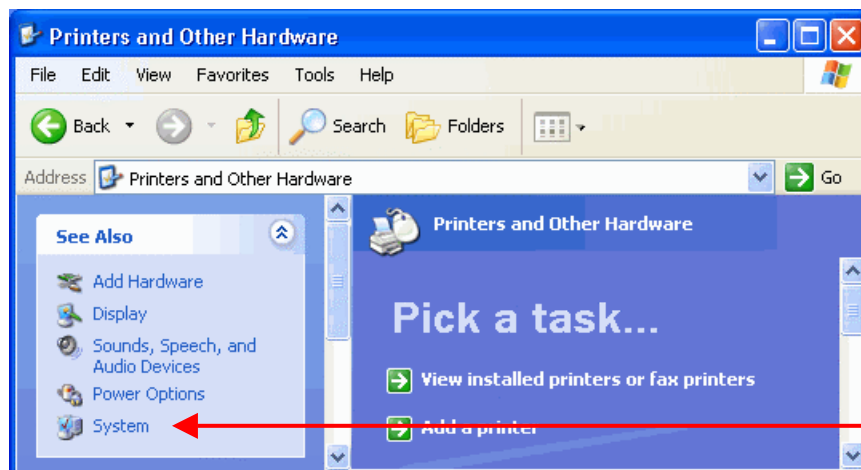


Figure 8.2-15: Starting the System Applet

- (2) Start the Device Manager via the "Device Manager" button.

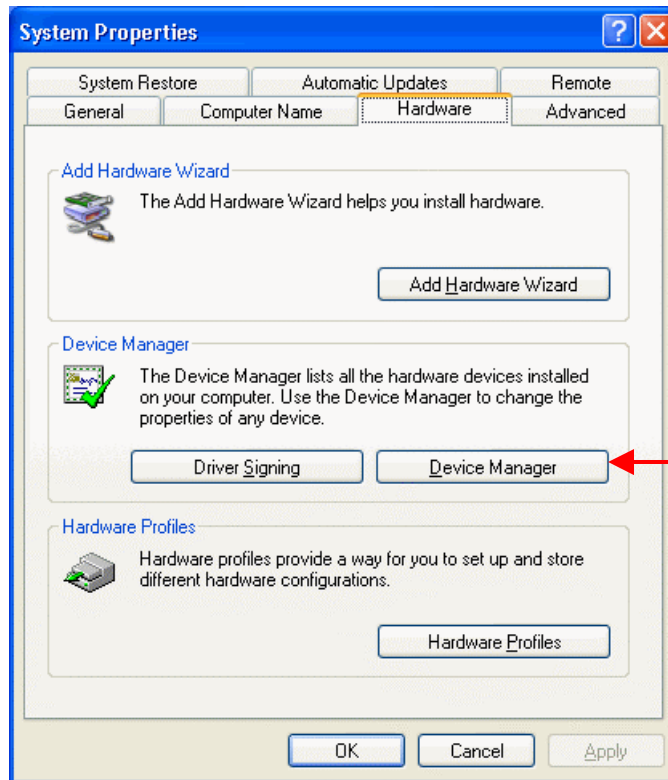


Figure 8.2-16: Starting the Device Manager

- (3) Select the installed PC/CAN-interface in the Device Manager.
Open the properties of the PC/CAN-interface whose settings you wish to change.

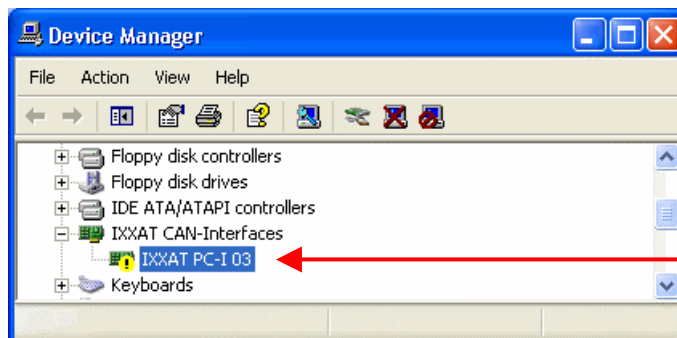


Figure 8.2-17: The Device Manager

- (4) If the settings conflict with existing resource configuration Windows will show the following error message. Use the button "Set Configuration Manually" to adapt the settings.

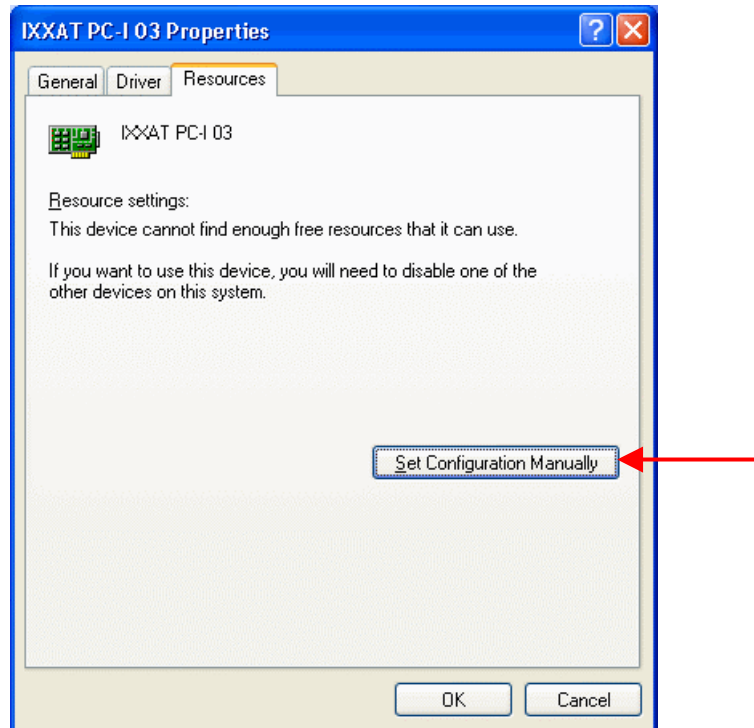


Figure 8.2-18: Notification about resource conflicts

(5) Changing the settings:

Now you see the settings entered during the installation.

Adapt the resources according to the settings made by you on the PC/CAN-interface for address and interrupt.

Your alterations are adopted with "OK".

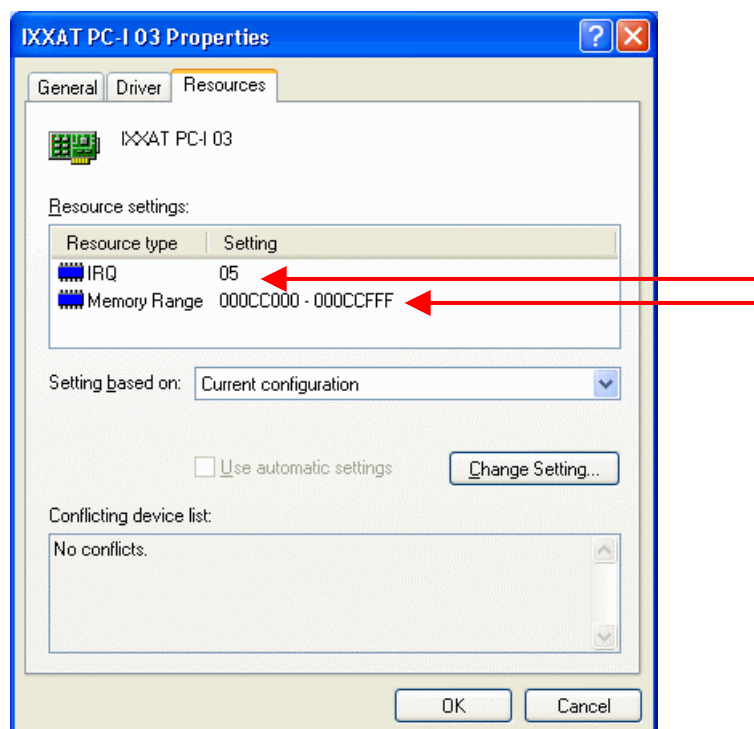


Figure 8.2-19: Adaptation of settings

- (6) If the configured board address and IRQ was free on your machine the access test via the button "Test" can be performed.

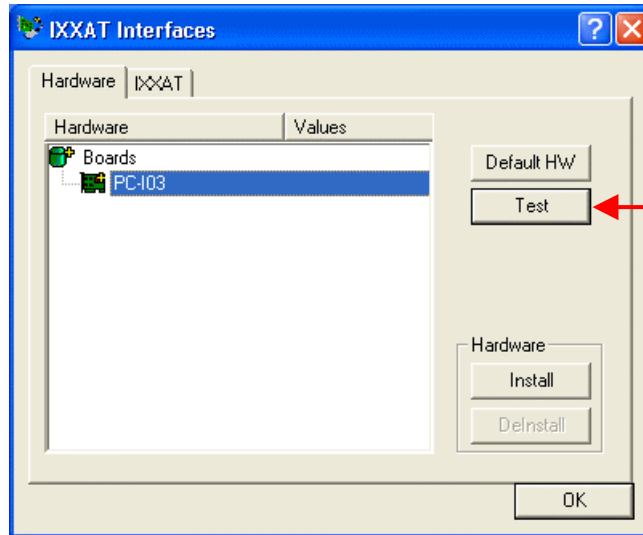


Figure 8.2-20: Test of the interface

8.3 Installation of CANDy and CANDy lite



CANDy / CANDy lite has to be connected to the LPT-Port and the power supply before booting the machine.

8.3.1 Enabling LPT-Port Interrupts

CANDy and CANDy lite need the LPT-Port interrupt. This interrupt is disabled under Windows 2000 by default. At first the user has to enable the interrupt manually:

- (1) Start the applet "System" within the Control Panel category "Printers and Other Hardware".

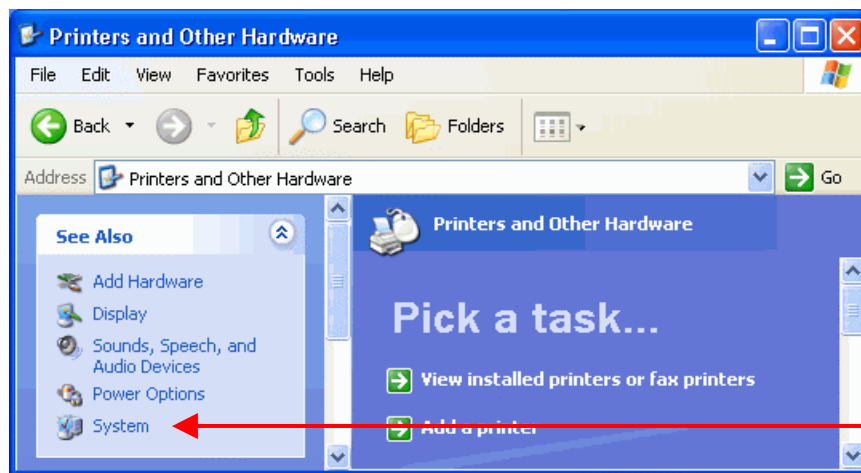


Figure 8.3-1: Starting the System Applet

Hardware installation WindowsXP

- (2) Start the Device Manager via the “Device Manager” button.

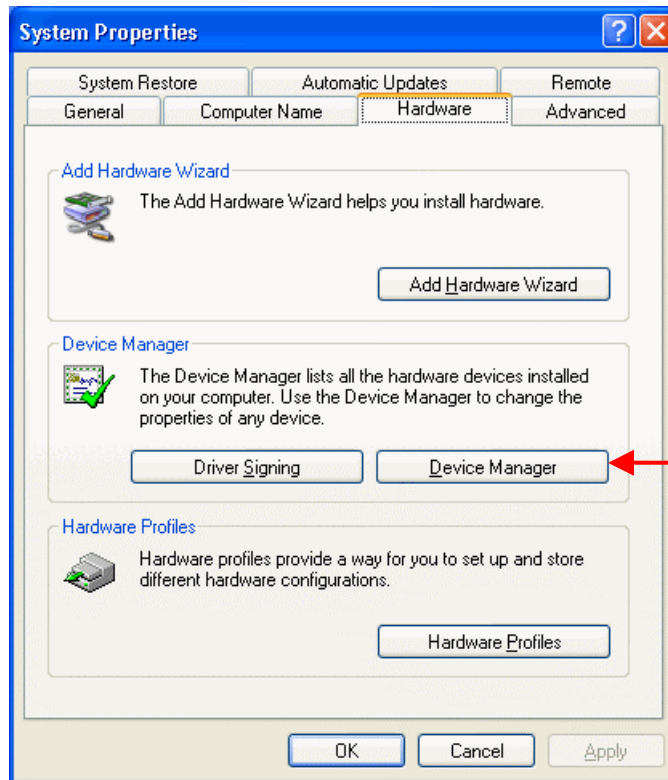


Figure 8.3-2: Starting the Device Manager

- (3) Open the properties of the LPT-Port where CANdy / CANdy lite is connected to.

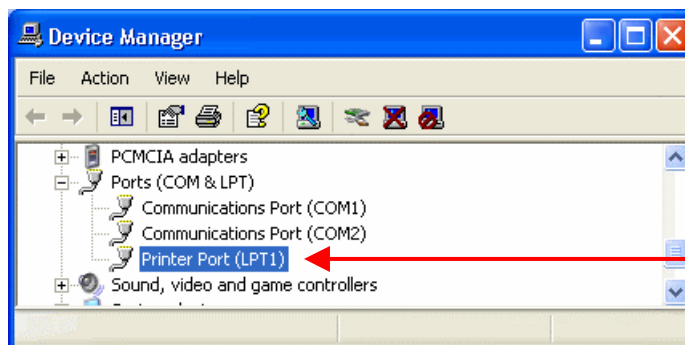


Figure 8.3-3: The Device Manager

(4) Enable interrupt for the LPT-Port:

If you switch to the "Port Settings" tab in the hardware properties dialog, you will see the settings entered by Windows. Select „Use any interrupt assigned to the port“ and adopt the modification with "OK".

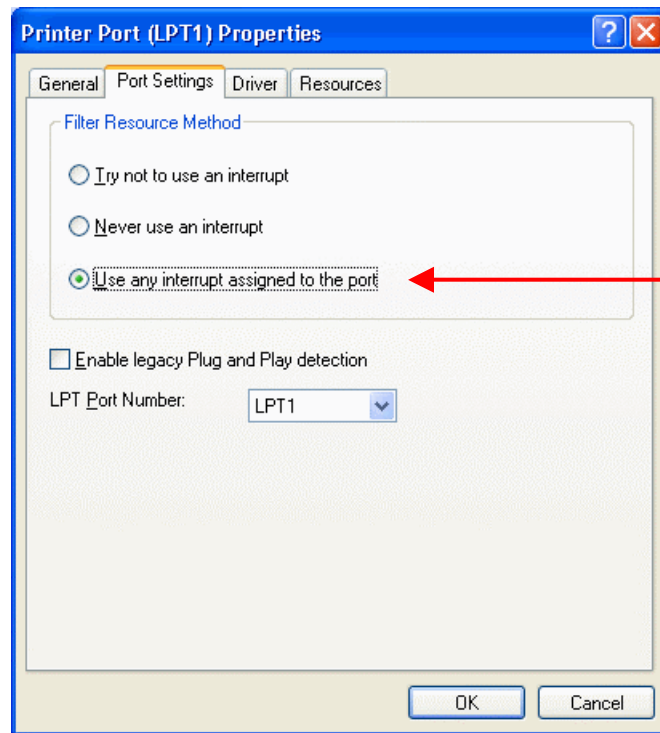


Figure 8.3-4: Changing the LPT-Port settings

! If LPT-Port Bios settings are not running for CANDy or CANDy lite after installation you will have to modify them. After rebooting the machine Windows XP may have reset the LPT-Port Device Manager settings to default values. Therefore check Device Manager settings after modifications on Bios settings.

8.3.2 Installation

CANDy and CANDy lite are installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.

- (1) Start the IXXAT Interfaces Applet within the Control Panel category "Other Control Panel Options".

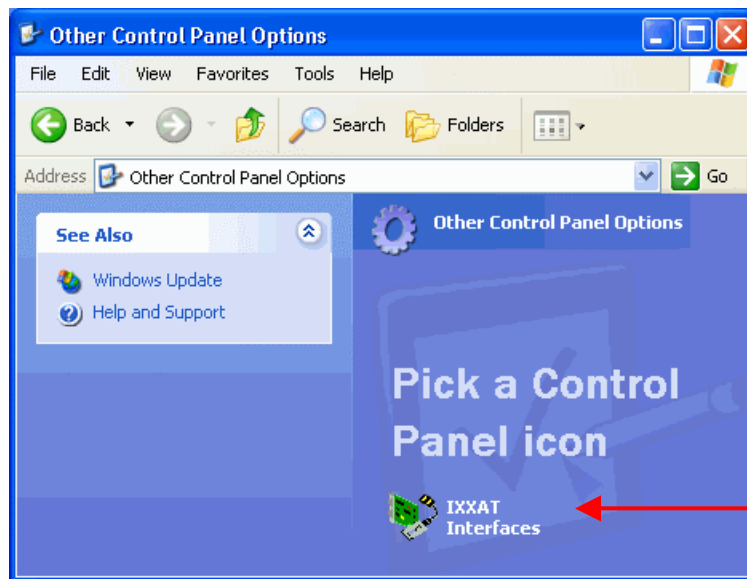


Figure 8.3-5: Starting the IXXAT Interfaces Applet

- (2) Click on the “Install” button in the Applet in order to install new hardware.

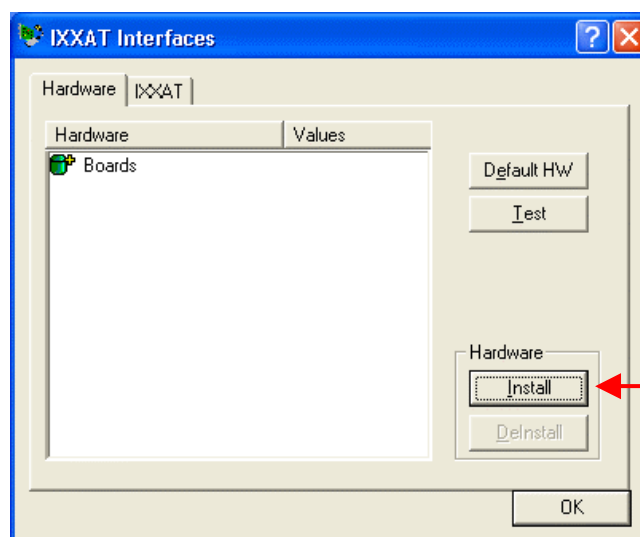


Figure 8.3-6: IXXAT Interfaces Applet

- (3) Select "IXXAT CANdy Install" to open CANdy installation dialog, where adapter type and port number must be selected. In addition, the address and IRQ of the chosen parallel port are displayed.

Select the type of parallel port CAN-interface to be installed (CANdy, CANdy lite).

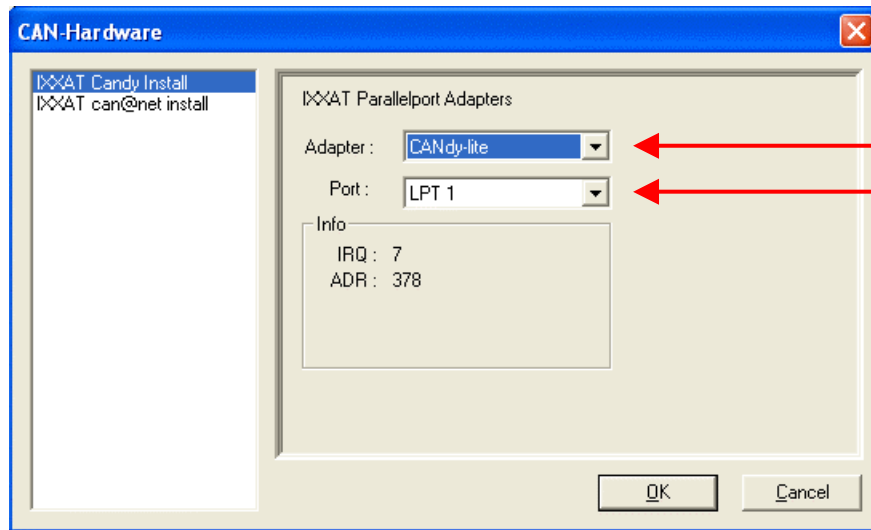


Figure 8.3-7: Installation of a parallel port CAN-interface

- (4) Select the parallel port of the connected CAN-interface.
- (5) End the installation by "OK".
- (6) The main window of the IXXAT Interfaces Applet now shows the CANdy-lite installed in the above example.

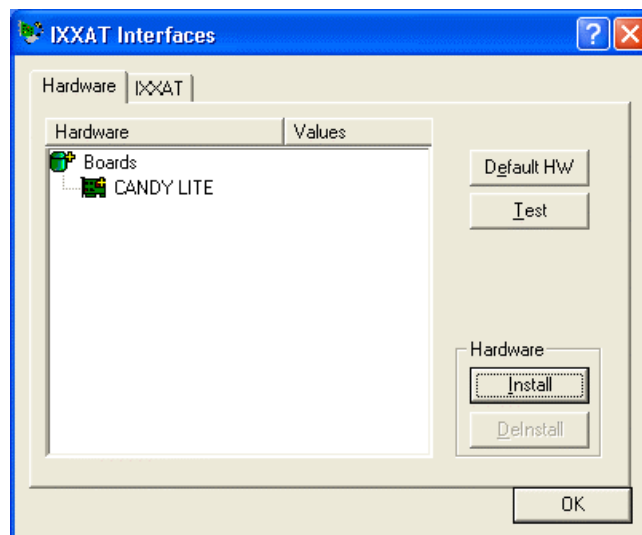


Figure 8.3-8: The Applet after installation of a CANDy-lite

- (7) Select the CANDy / CANDy lite and press the "Test" button to test the access to the device.

8.4 Installation of CAN@net

CAN@net is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software must be already installed.

! If you already worked with CAN@net and older versions of VCI perhaps you want to reuse the existing CAN@net configurations (symbolic name, IP address and password). Therefore move the file `xatcn_nt.ini` into the directory `C:\Windows\system`. Such a file was created in the application directory of each application that used CAN@net. After the next startup of IXXAT Interfaces applet your previous CAN@net configurations will be available.

- (1) Start the IXXAT Interfaces Applet within the Control Panel category "Other Control Panel Options"

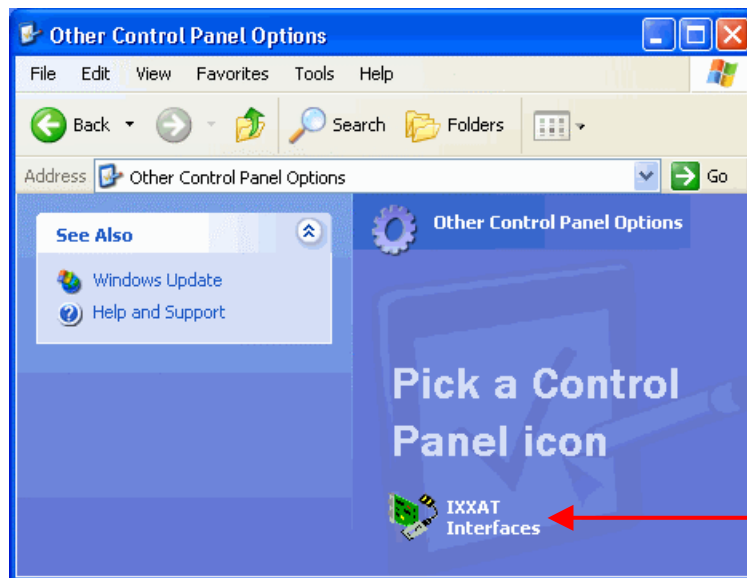


Figure 8.4-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the applet in order to install new hardware.

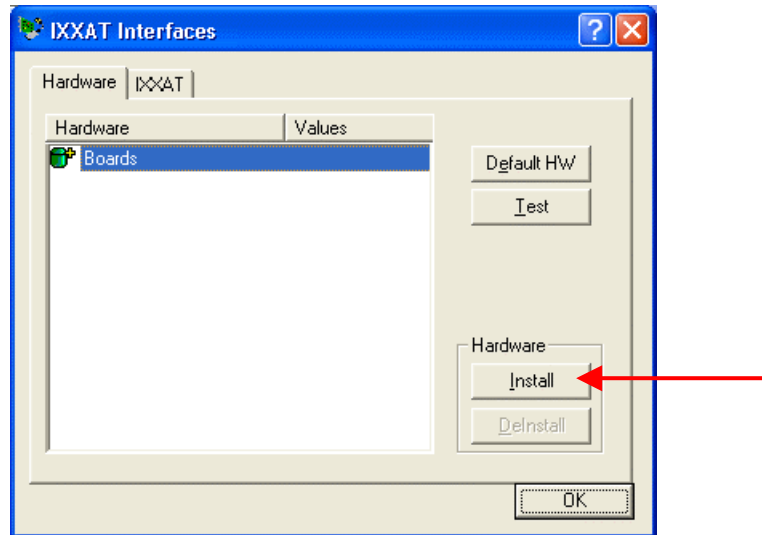


Figure 8.4-2: IXXAT Interfaces Applet

- (3) A CAN@net installation dialog appears after selecting "IXXAT CAN@net Install". Create a new configuration by clicking the "Add" button.

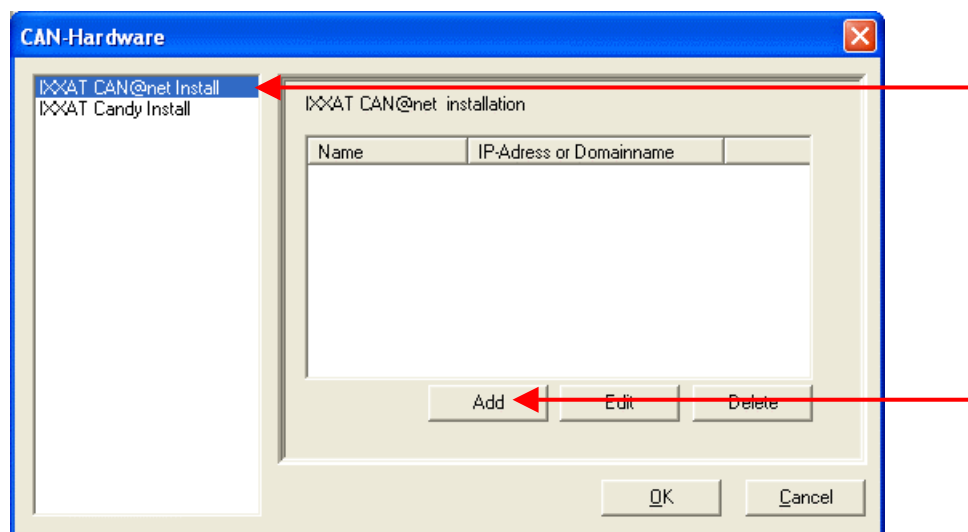


Figure 8.4-3: Installation of CAN@net

- (4) Define a symbolic name, the IP address and the password. If there is a DNS entry for the CAN@net device you may alternatively type in a domainname instead of the IP address. The default password at delivery time is **"Ixxat"**.

In the Description field you may input additional userdefined description text. Add new text lines with Ctrl+Enter.

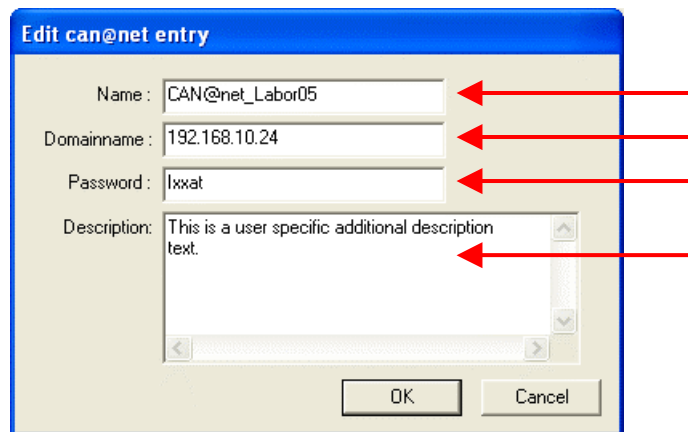


Figure 8.4-4: New CAN@net configuration

! IP address and password are configurable via RS232 connector of the CAN@net interface (refer CAN@net Hardware Manual).

- (5) The new configuration appears within the installation dialog. Clicking the "OK" button will set up a CAN@net device based on the selected configuration.

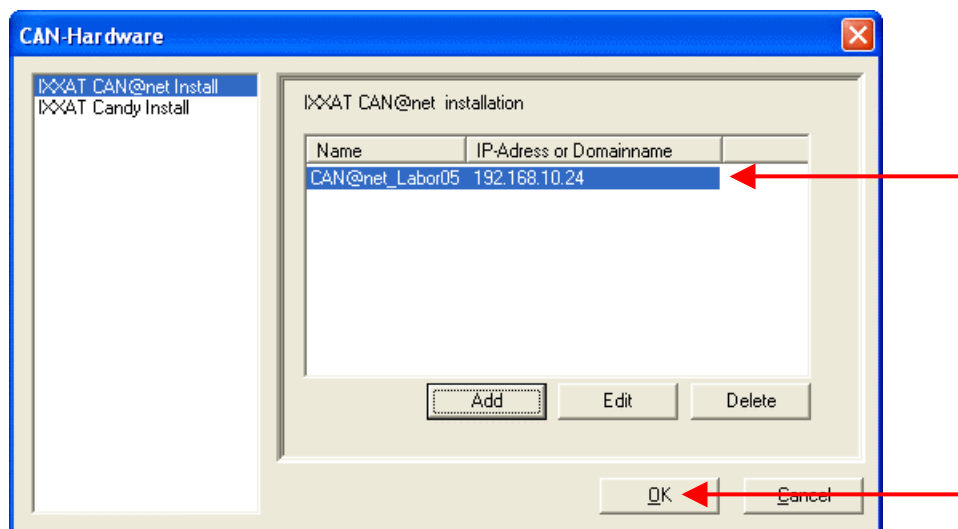


Figure 8.4-5: Installation dialog with new CAN@net configuration

If there is more than one configuration defined you can use another device by selecting another configuration. Existing configurations can be edited via the "Edit" button and deleted via the "Delete" button.

- (6) The set up CAN@net device now appears in the main window of the IXXAT Interfaces applet. If the configured IP address and password is correct the access test via the "Test" button can be performed.

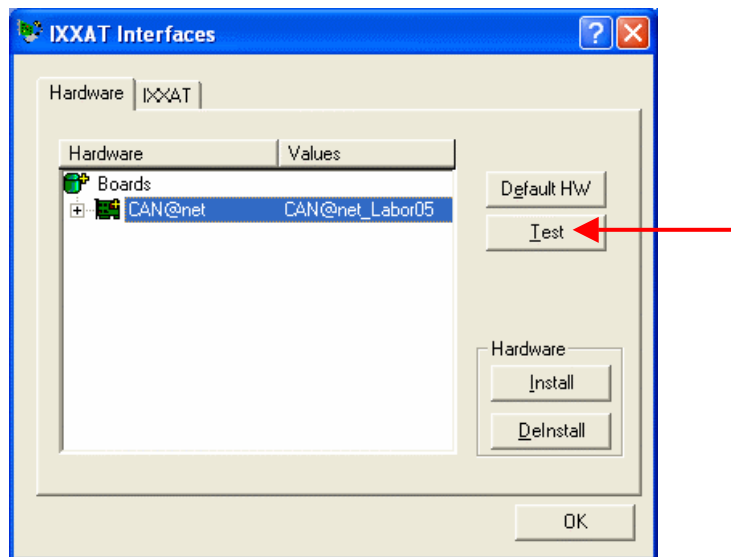


Figure 8.4-6: Applet after installation of the CAN@net interface

9 Important information

9.1 Updating to a new VCI version

If you have already installed VCI-driver software and would now like to update to a newer version of the VCI, please proceed as follows:

- (1) Please download the VCI-Cleaner from our homepage. For this you will require the password which you received with the information sheet enclosed with your hardware.
- (2) Deinstall the current VCI via the Applet "Add/Remove Programs" in the Control Panel.
- (3) Under Windows 95/98/2000/XP remove all IXXAT CAN interfaces from the Device Manager. For this, mark each interface and click the "Remove" button. If tinCAN or USB-to-CAN is installed, it must also be plugged in, as otherwise it is not visible in the Device Manager.
- (4) Start the VCI Cleaner in order to ensure complete removal of VCI files and VCI registry entries from your Windows drive. For this, mark the drive on which you have installed Windows. Ensure that you have activated the option "Search for Inf-file" under Windows95/98/ME/2000/XP. Always use the newest version that is available on the web.
- (5) Without restarting the computer, install the new VCI version by executing the setup. Then restart the computer.

9.2 Plug&Play hardware installed prior to VCI-installation

If you have already installed your IXXAT PCI-card under Windows 95/98/ME/2000/XP, or if you have already plugged in your PCMCIA-card or your USB-to-CAN interface before the VCI was installed, then Windows starts the automatic hardware wizard after booting. This requires the position of the corresponding INF-files, as described in this installation manual.

If you have downloaded the VCI from our homepage, then you do not have these INF-files in unpacked form as described in this manual. Therefore, cancel the automatically started hardware installation and then proceed as follows:

- (1) Under Windows 95, an unknown hardware component was installed in the device manager due to the cancellation of the hardware wizard. Remove this and close the Device Manager again. This step does not apply to the other operating systems.
- (2) Install the VCI. The required INF-files are installed together with the VCI.

- (3) Restart Windows. Your Plug&Play hardware is now detected and installed automatically.

9.3 Installation of INF file with right-hand mouse button

The INF-files of the driver CD should *not* be installed directly via the right –hand mouse button in the Explorer. Correct installation is only carried out via the hardware wizard.

9.4 Missing COMCAT.DLL

With older versions of Windows 95, there may be problems with the registration of some components during installation of the driver. This is due to the missing COMCAT.DLL.

Installation of the DCOM95 extension eliminates this problem. DCOM95 can be downloaded from the Microsoft homepage:

<http://www.microsoft.com>