

VCI - Virtual CAN Interface

VCI-V2 Installation Manual

Software Version 2.18

IXXAT

Headquarter

IXXAT Automation GmbH
Leibnizstr. 15
D-88250 Weingarten

Tel.: +49 (0)7 51 / 5 61 46-0
Fax: +49 (0)7 51 / 5 61 46-29
Internet: www.ixxat.de
e-Mail: info@ixxat.de

US Sales Office

IXXAT Inc.
120 Bedford Center Road
USA-Bedford, NH 03110

Phone: +1-603-471-0800
Fax: +1-603-471-0880
Internet: www.ixxat.com
e-Mail: sales@ixxat.com

Support

In case of unsolvable problems with this product or other IXXAT products please contact IXXAT in written form by:

Fax: +49 (0)7 51 / 5 61 46-29
e-Mail: support@ixxat.de

Copyright

Duplication (copying, printing, microfilm or other forms) and the electronic distribution of this document is only allowed with explicit permission of IXXAT Automation GmbH. IXXAT Automation GmbH reserves the right to change technical data without prior announcement. The general business conditions and the regulations of the license agreement do apply. All rights are reserved.

1	Overview	5
2	Support	5
	2.1 Returning hardware	6
3	Installation of the VCI driver software	6
4	The IXXAT Interfaces Applet	6
	4.1 Starting the IXXAT Interfaces Applet	6
	4.2 Display function of the IXXAT Interfaces Applet	7
	4.3 Access test of the PC/CAN Interface	8
5	Hardware installation – Windows 2000	9
	5.1 Installation of PCI-, USB- or PCMCIA-Interfaces	10
	5.2 Installation of ISA-cards	11
	5.2.1 Installation.....	12
	5.2.2 Changing the Default settings.....	15
	5.3 Installation of CAN@net II	17
	5.4 Installation of CANblue	20
	5.4.1 Set up Bluetooth connection.....	20
	5.4.2 Installation of CANblue.....	24
6	Hardware installation – Windows XP / Vista	26
	6.1 Installation of PCI-, USB- or PCMCIA-Interfaces	26
	6.2 Installation of ISA cards	28
	6.2.1 Installation.....	28
	6.2.2 Changing the settings.....	32
	6.3 Installation of CAN@net II	35
	6.4 Installation of CANblue	37
	6.4.1 Set up Bluetooth connection.....	37
	6.4.2 Installation of CANblue.....	41
7	Important information	42
	7.1 Updating to a new VCI version	42
	7.2 Plug&Play hardware installed prior to VCI-installation	42
	7.3 Installation of INF file with right-hand mouse button	43

1 Overview

The VCI is a universal CAN-driver for all PC/CAN-cards from IXXAT and is included in the delivery of the CAN-cards. As a DLL for Windows 2000/XP/Vista, it forms the interface between the user application and the various IXXAT PC/CAN-Interfaces. 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 Section 7.1, 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 for Windows 2000 and Windows XP/Vista.

Depending on the operating system and the 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 VCI CAN-driver software.
- (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 hardware as described in this manual.
- (5) Familiarize yourself 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 manuals and the information on our homepage, 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 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 becomes 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 describe the problem or error in detail on the RMA form. This enables us to process your repair quickly.

3 Installation of the VCI driver software



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 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 previously 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 2000 (and Windows XP/Vista 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 the Windows XP/Vista start menu view the IXXAT Interfaces icon is contained by the subfolder "Other Control Panel Options".

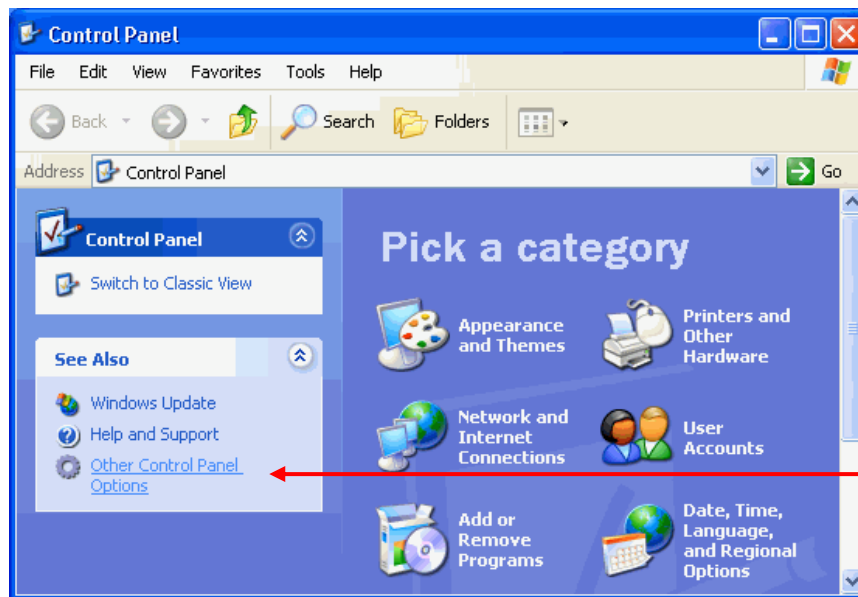


Figure 4-2: Windows XP Control Panel

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.).

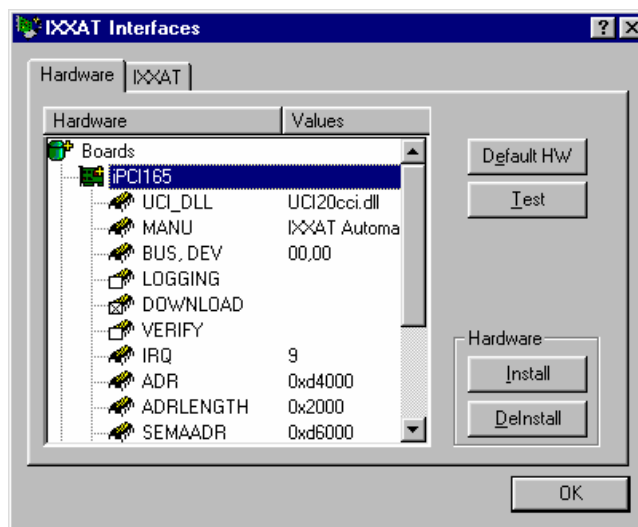


Figure 4.2-1: Information on an installed iPC-I 165

The entries LOGGING, DOWNLOAD and VERIFY have special functions:

- **LOGGING:** When Logging is activated, the log files "ccidpram.log" and "uci20cci.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 of the 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.

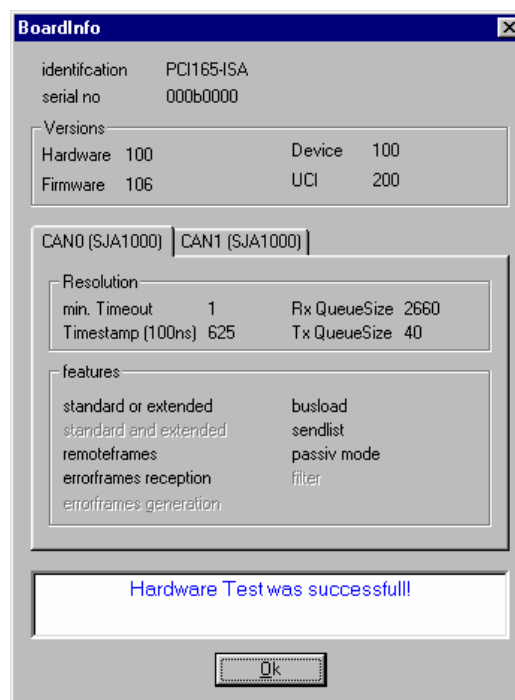


Figure 4.3-1: Specific properties of the installed board

The section **Versions** provides version information about the hardware and the driver. The version numbers are shown with three digits. The first digit is the major version number, digit two and three build the minor version number (e.g. "106" means version 1.06).

For each CAN controller on the PC/CAN interface there is a separate register card with the type of CAN controller, its property and features. Not supported features are displayed in gray color.

Property / Feature	Bedeutung
Timestamp (100ns)	Hardware specific timestamp resolution in 100 nsec
Rx QueueSize	The driver's receive queue size in number of messages
Tx QueueSize	The driver's transmit queue size in number of messages
standard or extended	Exclusive operation of standard and extended CAN protocol
standard and extended	Simultaneous operation of std. and ext. CAN protocol
remoteframes	Reception of RTR frames
errorframe generation	Generation of error frames
busload	Calculation of busload
sendlist	Support of cyclic transmit objects (see UCI Programming manual)
passiv mode	Listen to bus traffic without sending the acknowledge bit
filter	Exact filtering of 29-bit identifiers

5 Hardware installation – Windows 2000

 Under Windows 2000 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, iPC-I XC16/PCI, iPC-I XC16/PMC	via automatically started hardware wizard	5.1
PCMCIA: tinCAN161	via automatically started hardware wizard	5.1
USB: USB-to-CAN compact, USB-to-CAN II	via automatically started hardware wizard	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
TCP/IP: CAN@net II	via IXXAT Interfaces Applet	5.3
Bluetooth: CANblue	via IXXAT Interfaces Applet	5.4

5.1 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 in 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 Windows 2000 is first booted after installing the PCI-card, the tinCAN or the USB-to-CAN, the hardware wizard is automatically started. Confirm the first dialog with the "Next" button.
- (3) A driver must be installed for the PC/CAN-interface card which has been found. If the VCI or the driver has previously 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".

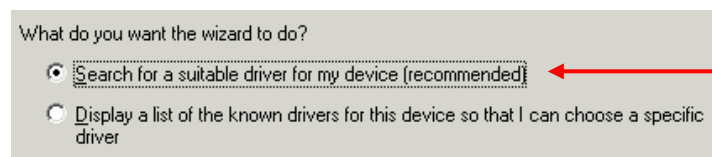




Figure 5.1-1: Procedure for driver search

- (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 the driver for Win95/98 is found! Therefore do not mark the "CD-ROM"-button!**

Continue with "Next".

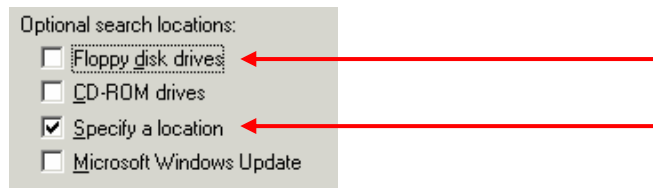


Figure 5.1-2: Entering the search drives

(5) Entering the drive position

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

Start the search for the driver with "OK".

(6) Windows finds a driver for the new PC/CAN-Interface and displays this in a new dialog. Acknowledge the dialog with "Next".

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

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 is ready for use.

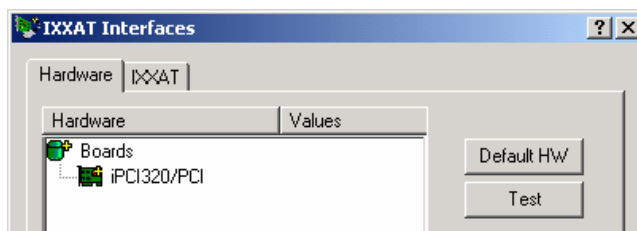


Figure 5.1-3: iPC-I 320/PCI installed

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 "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 in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing; instead they address 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). The IRQ is to be reserved in the Bios for ISA-cards.

5.2.1 Installation

- (1) Start the Hardware Wizard.

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

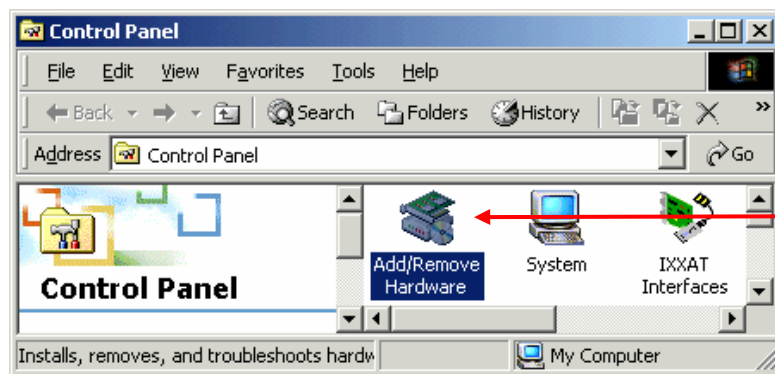


Figure 5.2-1: Starting the hardware wizard

- (2) The welcome dialog of the Hardware Wizard appears. Acknowledge this with the "Next"-button.
- (3) Mark the button for installing new hardware and acknowledge the dialog with the "Next"-button.

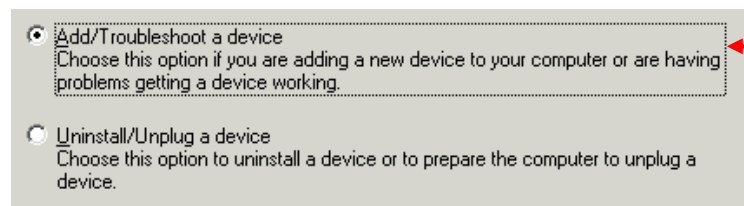


Figure 5.2-2: Selection of the Wizard task

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

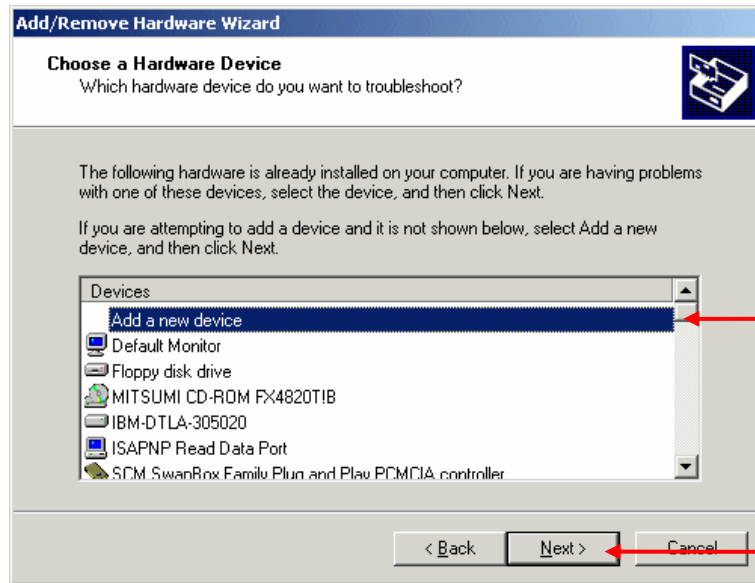


Figure 5.2-3: Selection for installing new hardware

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

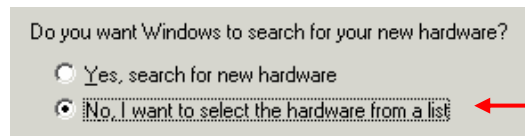


Figure 5.2-4: Do not search for hardware

- (6) If the VCI-software was previously 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.

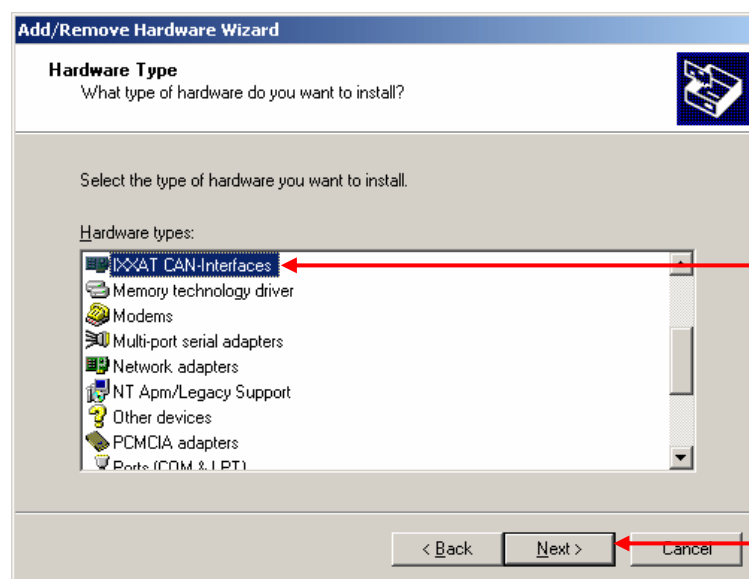


Figure 5.2-5: Selection of the hardware type

- (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.

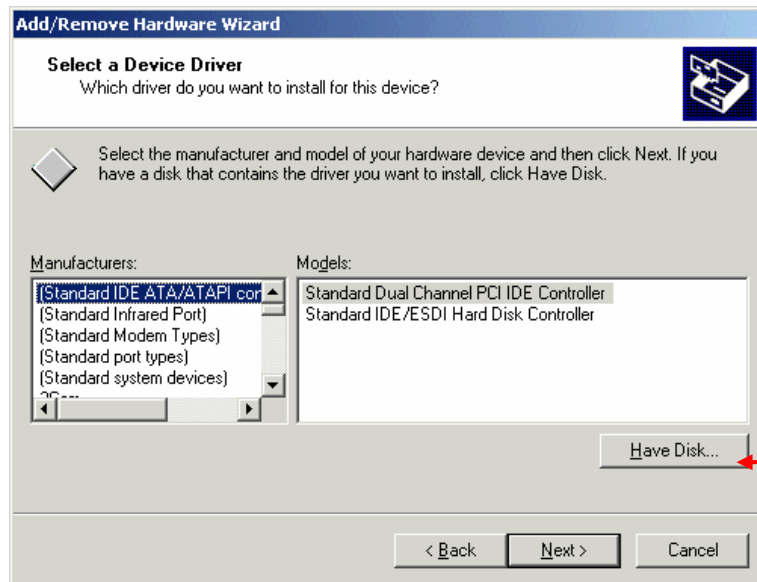


Figure 5.2-6: List of hardware manufacturers

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

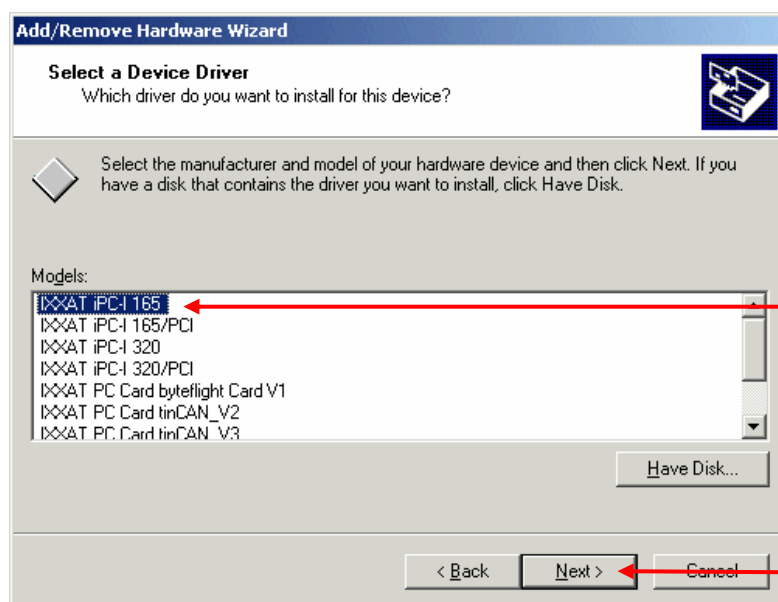




Figure 5.2-7: Selection of the driver to be installed

 **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 5.2.2). However, you must first accept the recommended settings and go on with "Next".

(11) Installation of the new component is now complete and can be ended with "Finish". 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 5.2.2 for this.**

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

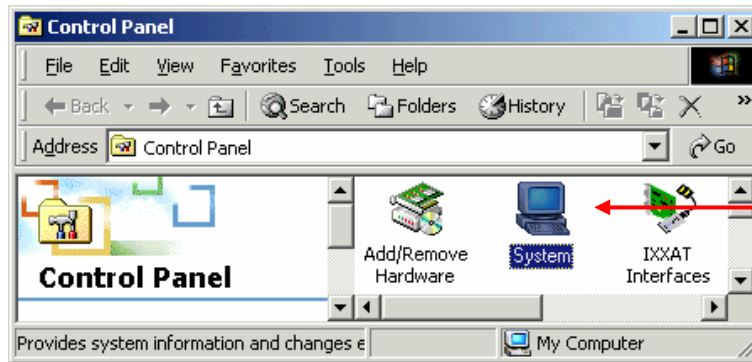


Figure 5.2-8: Starting the System Applet

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



Figure 5.2-9: 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.

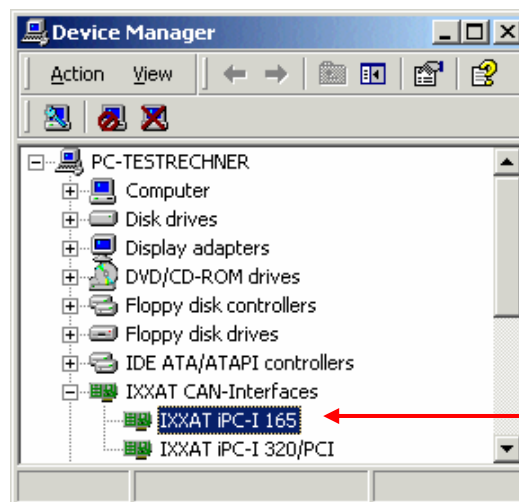


Figure 5.2-10: The Device Manager

(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".

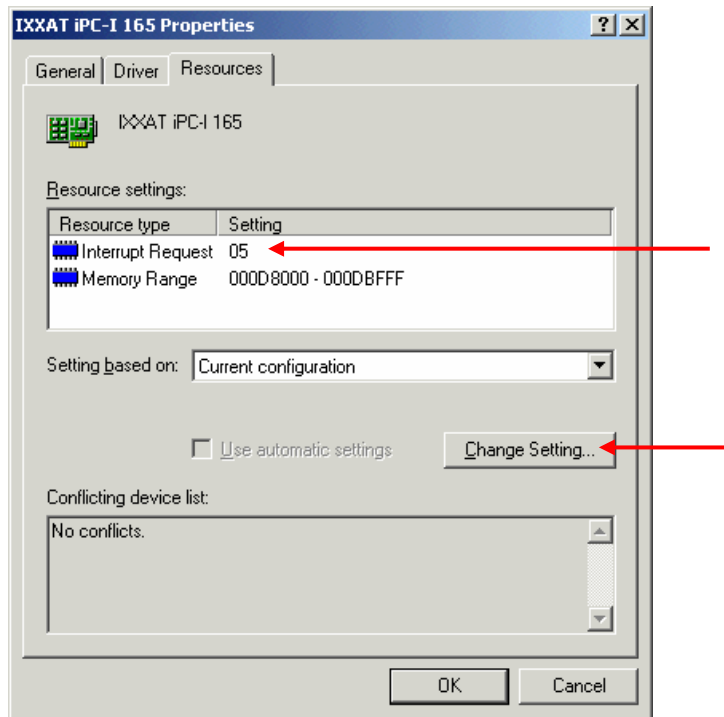


Figure 5.2-11: Changing the PC/CAN-interface settings

5.3 Installation of CAN@net II

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

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

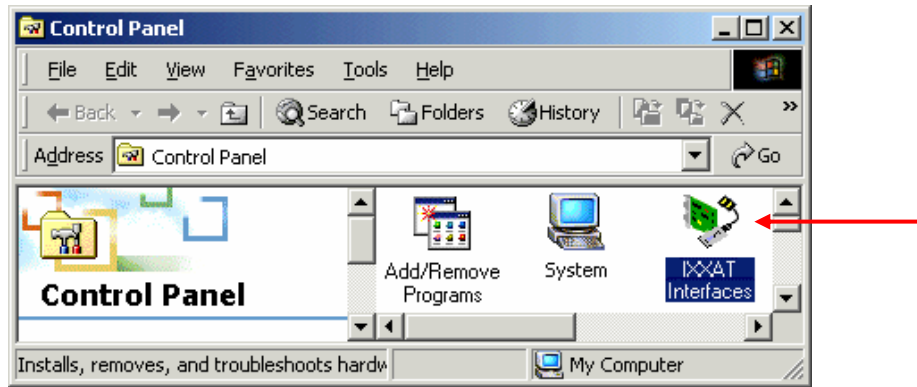


Figure 5.3-1: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the applet in order to install new hardware.
- (3) A CAN@net II installation dialog appears after selecting "IXXAT CAN@net II Install". Create a new configuration by clicking the "Add" button.

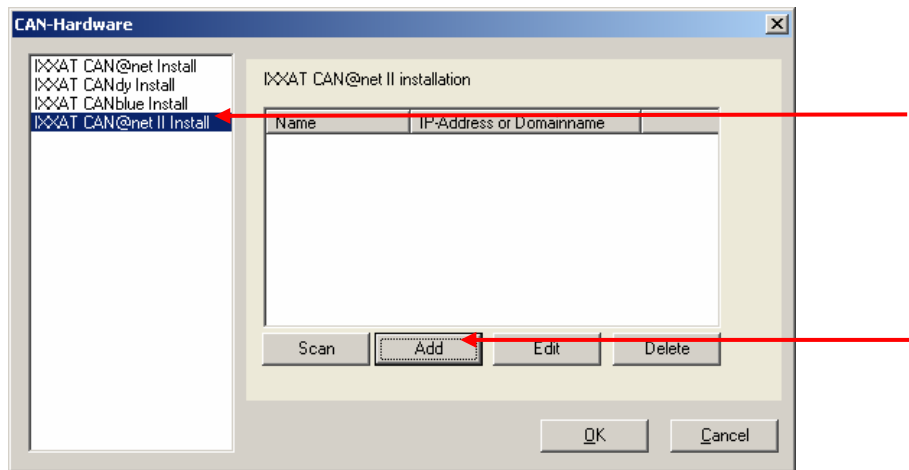


Figure 5.3-2: Installation of CAN@net II

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

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

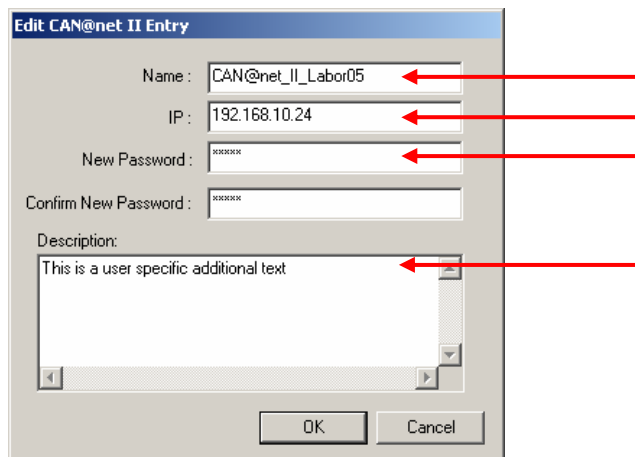


Figure 5.3-3: New CAN@net II configuration

! IP address and password are configurable via the CAN@net II Configurator (refer to CAN@net II Hardware Manual).

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

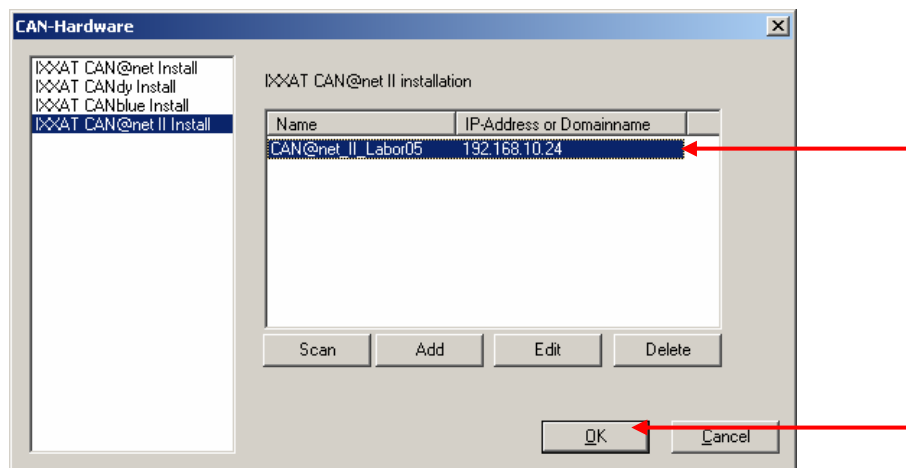


Figure 5.3-4: Installation dialog with new CAN@net II configuration

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 configured CAN@net II 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.

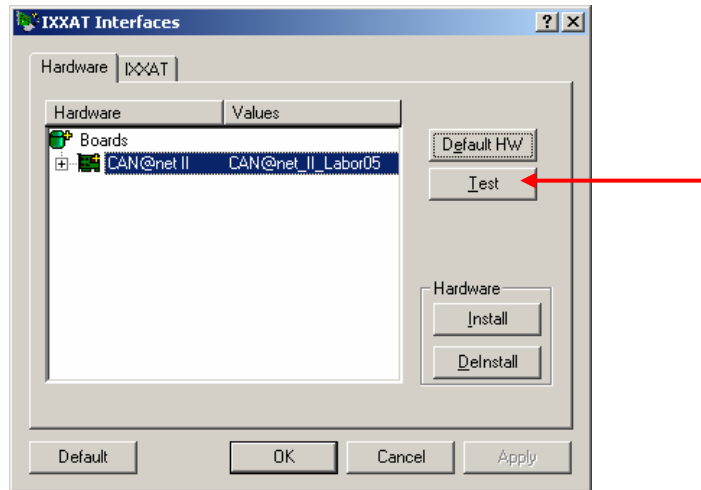


Figure 5.3-5: Applet after installation of the CAN@net II interface

5.4 Installation of CANblue

CANblue is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software V2.18 must be previously installed. Additionally you need a previously installed Bluetooth adapter. IXXAT recommends using a Bluetooth adapter which uses the Toshiba Bluetooth stack. In the following chapter, an installed Toshiba Bluetooth stack is presupposed. If you use a Bluetooth stack from another supplier, you have to set up the Bluetooth connection in a corresponding manner.

5.4.1 Set up Bluetooth connection

The following steps illustrate how to set up a Bluetooth connection using the Toshiba Bluetooth stack.

- (1) Open the dialog "Bluetooth Settings" (Icon on the task bar).

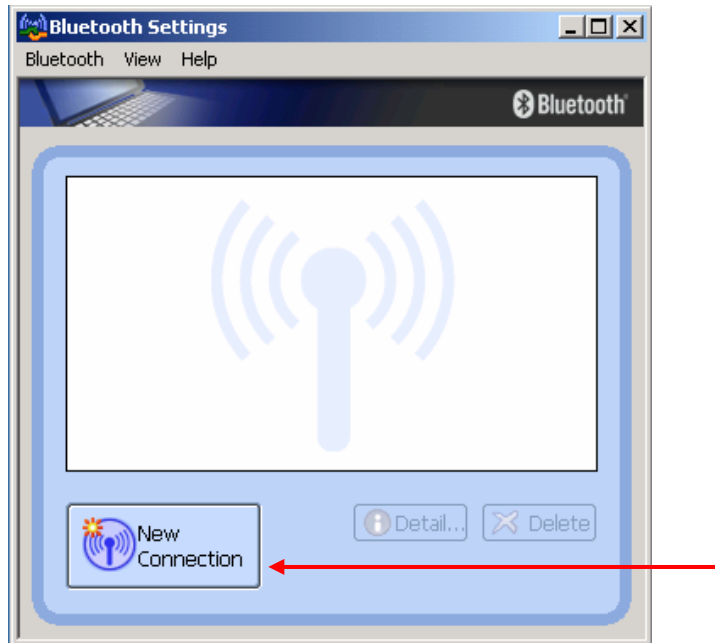


Figure 5.4-1: Bluetooth Settings – New Connection

- (2) Click on “New Connection” to open the dialog “Add New Connection Wizard” and select “Express Mode”.

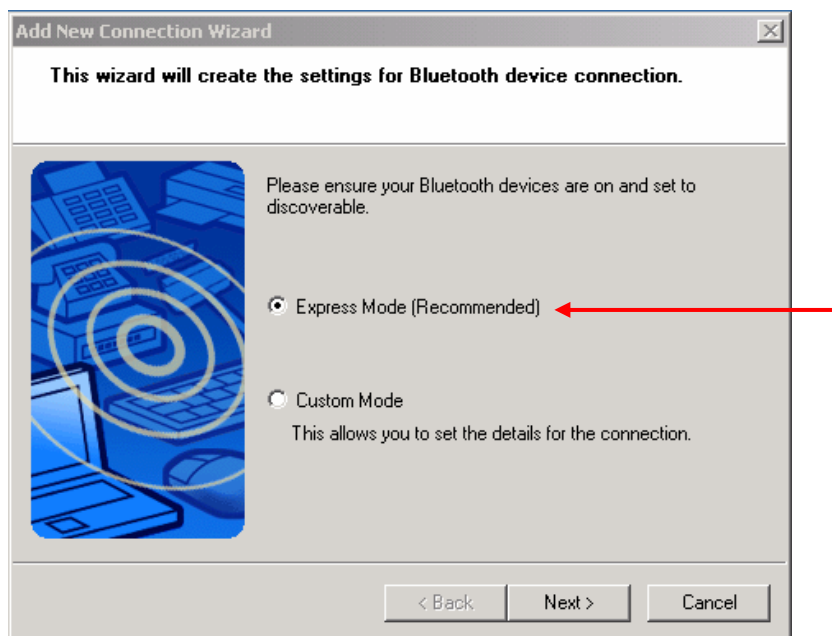


Figure 5.4-2: Connection Wizard – Select Mode

- (3) All available Bluetooth devices will be displayed. Select the IXXAT CANblue (xxxxxxxxxxx) device which has to be configured. The field behind the name “(xxxxxxxxxxx)” shows the MAC address which is also shown on the back of the CANblue device.

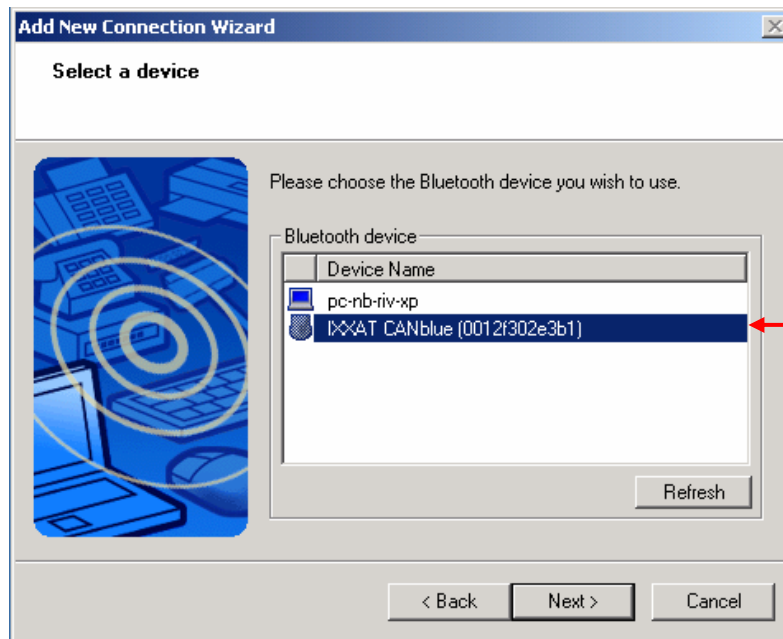


Figure 5.4-3: Connection Wizard – Select device

- (4) Now the dialog “Bluetooth Manager – Bluetooth Security” appears where you need to enter the **passkey** for the Bluetooth device. The passkey for the IXXAT CANblue device is **7388**.

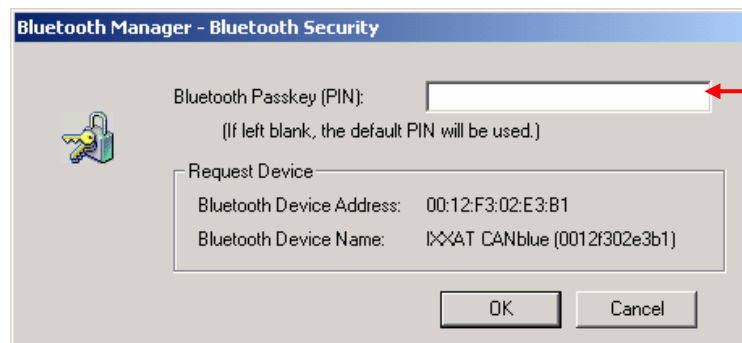


Figure 5.4-4: Bluetooth Security – Enter passkey

- (5) After entering the passkey the virtual COM port of the CANblue device is shown. Memorize the number of the COM port.

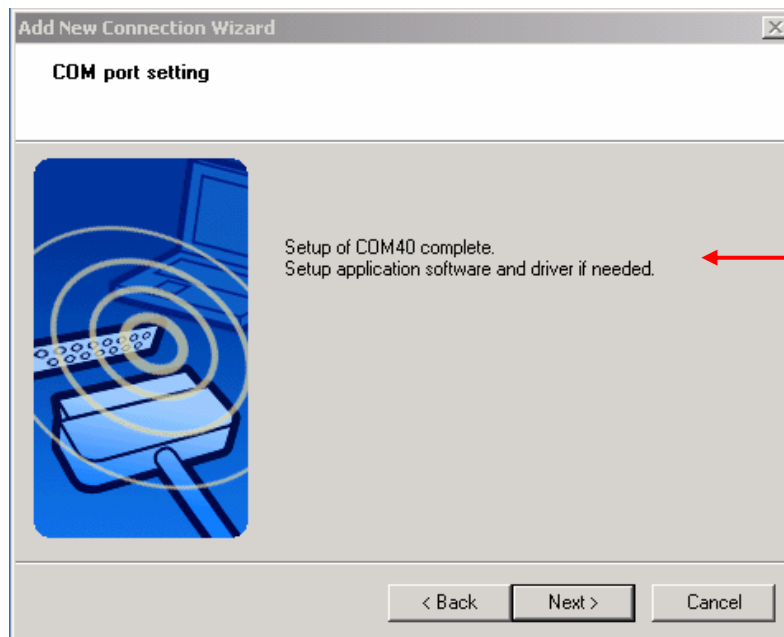


Figure 5.4-5: Connection Wizard – COM port

- (6) Furthermore it's possible to change the connection name and the icon of the CANblue device. However, it's recommended to keep the default connection name of the CANblue device.

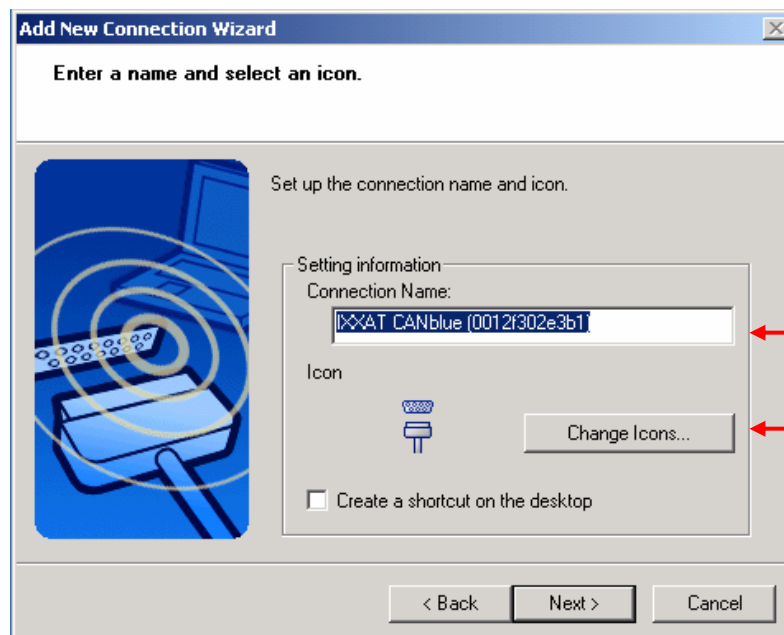


Figure 5.4-6: Connection Wizard – Change name and icon

- (7) Click on "Finish" to close the dialog "Add New Connection Wizard". Herewith the set up of the connection is completed and the CANblue device appears in the dialog "Bluetooth Settings".

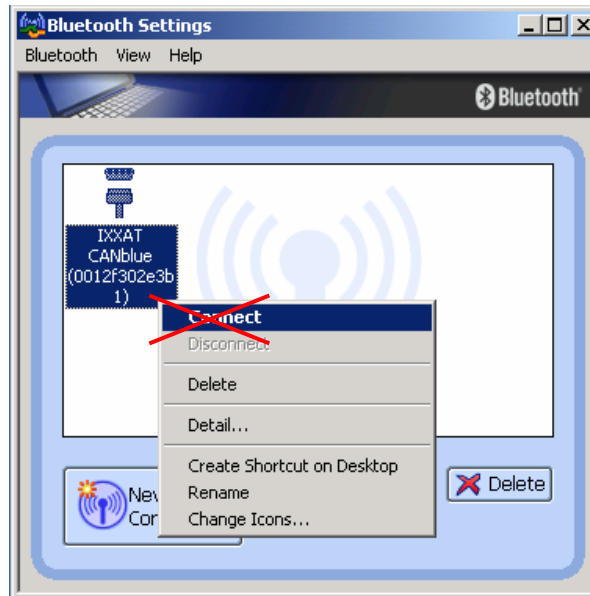


Figure 5.4-7: Bluetooth Settings – CANblue device

! It's not necessary to connect the CANblue device via the context menu, because the connection is made automatically.

5.4.2 Installation of CANblue

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

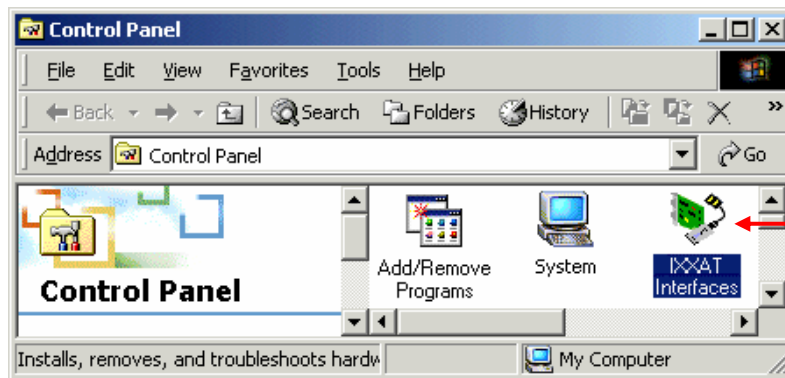


Figure 5.4-8: Starting the IXXAT Interfaces Applet

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

(3) A CANblue installation dialog appears after selecting “IXXAT CANblue Install”.

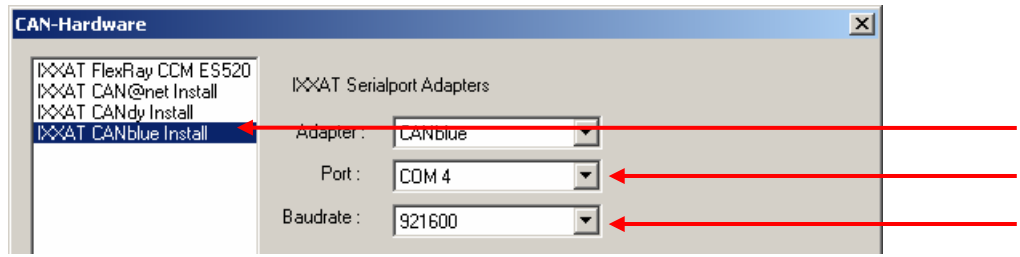


Figure 5.4-9: Installation of CANblue

- (4) Select the previously configured COM port (here COM 40), adjust to the highest baud rate supported by your Bluetooth stack (for the Toshiba stack set 921,6 kBaud) and close the dialog with "OK".
- (5) The configured CANblue device now appears in the main window of the IXXAT Interfaces Applet. If the configured COM port is correct the access test via the "Test" button can be performed.

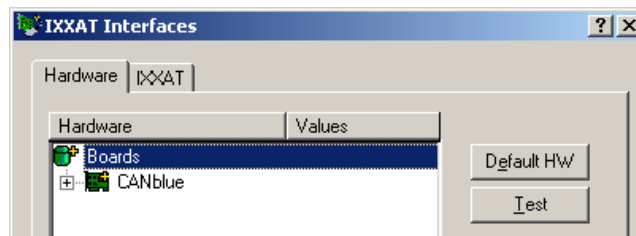



Figure 5.4-10: Applet after installation of the CANblue interface

6 Hardware installation – Windows XP / Vista

 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, iPC-I XC16/PCI, iPC-I XC16/PMC	via automatically started hardware wizard	6.1
PCMCIA: tinCAN161	via automatically started hardware wizard	6.1
USB: USB-to-CAN compact, USB-to-CAN II	via automatically started hardware wizard	6.1
ISA: iPC-I 320, iPC-I 165, PC-I 03	via manually started hardware wizard	6.2
PC/104: iPC-I 320/104, PC-I 04/104	via manually started hardware wizard	6.2
TCP/IP: CAN@net II	via IXXAT Interfaces Applet	6.3
Bluetooth: CANblue	via IXXAT Interfaces Applet	6.4

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

 If you are working with Windows XP / Vista 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 / Vista is first booted after installing the PCI-card, the tinCAN or the USB-to-CAN, the hardware wizard is automatically started. Confirm the first dialog with the "Next" button.



Figure 6.1-1: New USB-to-CAN compact 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 compact device):



Figure 6.1-2: Driver found

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

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

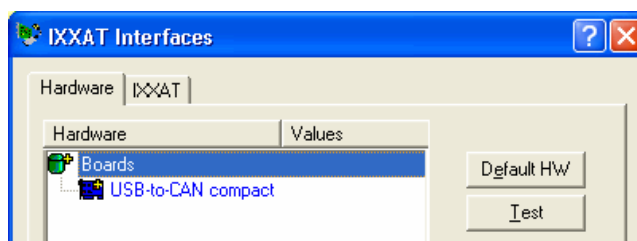


Figure 6.1-3: USB-to-CAN compact ready for use

6.2 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 in the hardware manual. 32-bit Windows operating systems don't work with DOS segment/offset addressing; instead they address 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, install the CAN card into your PC.

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

6.2.1 Installation

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

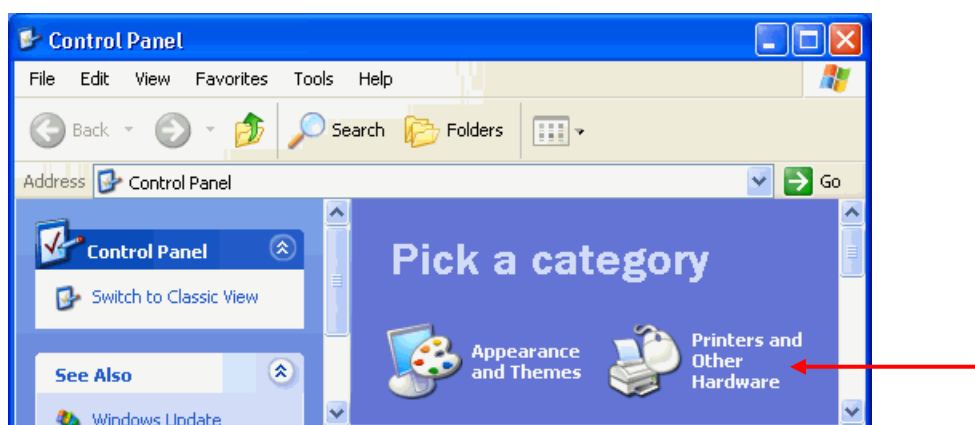


Figure 6.2-1: Opening Control Panel category

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

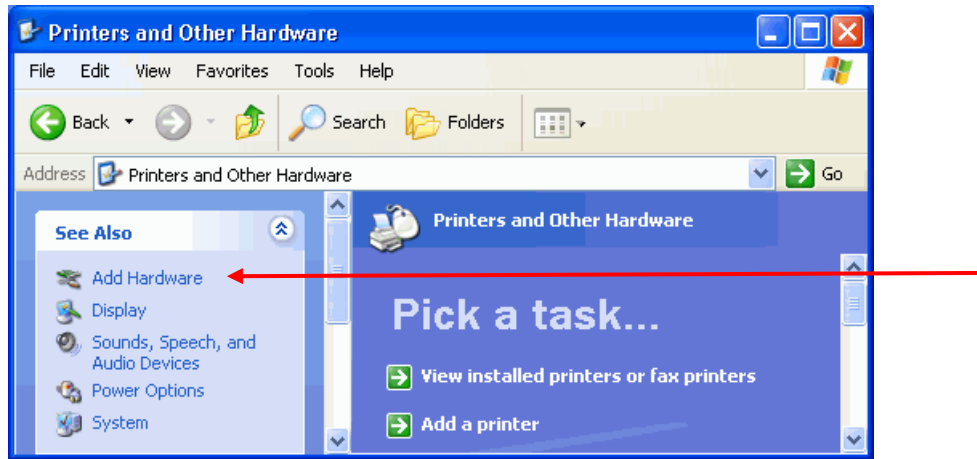


Figure 6.2-2: Starting the hardware wizard

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



Figure 6.2-3: The started Hardware Wizard

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

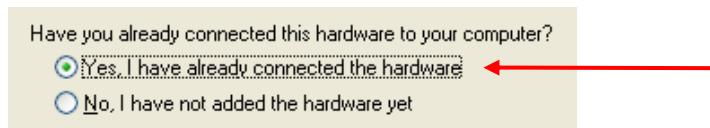


Figure 6.2-4: Selection of the Wizard task

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

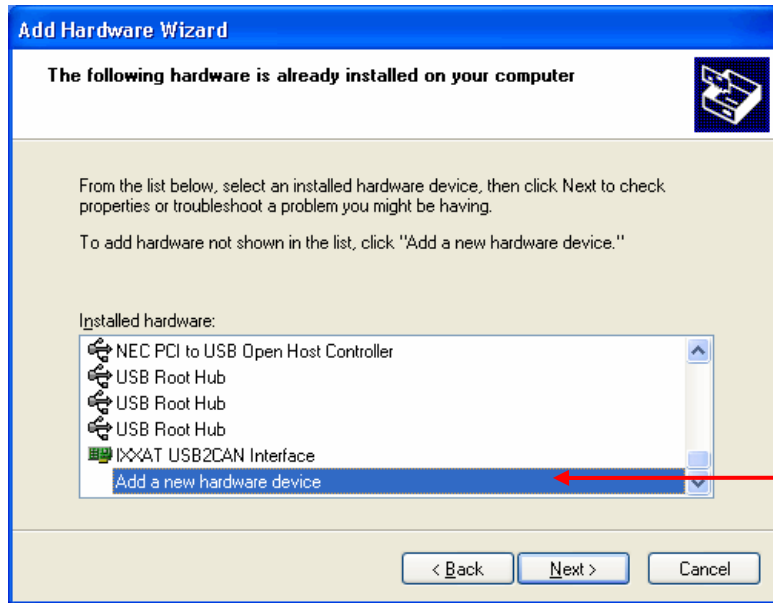


Figure 6.2-5: Selection for installing new hardware

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

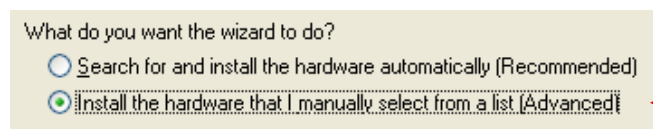


Figure 6.2-6: Manually select hardware from a list

- (7) If the VCI-software was 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.

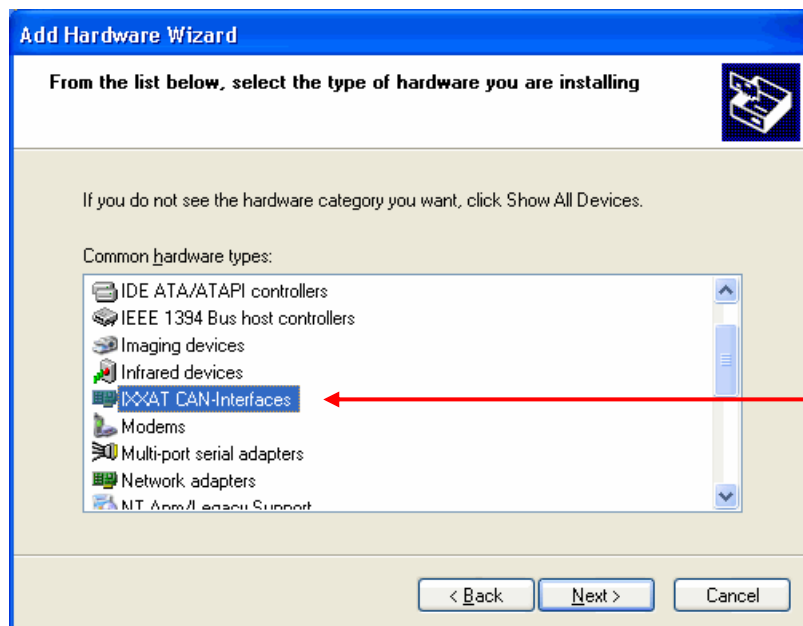


Figure 6.2-7: Selection of the hardware type

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

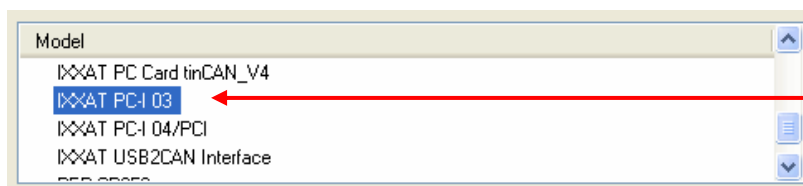


Figure 6.2-8: Selection of the driver to be installed

- ★ 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, which you acknowledge with the "Next" button.



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 6.2-9: 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.

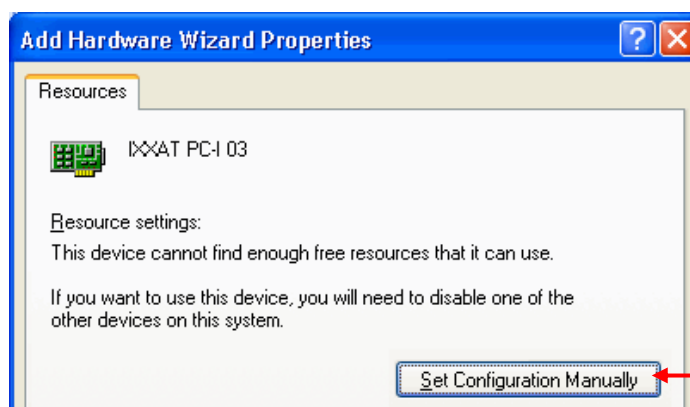


Figure 6.2-10: Notification about resource conflicts

(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".

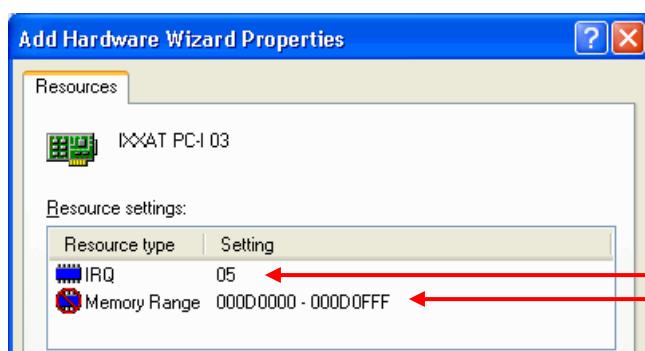


Figure 6.2-11: Adaptation of settings

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

(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 "Test" button can be performed.

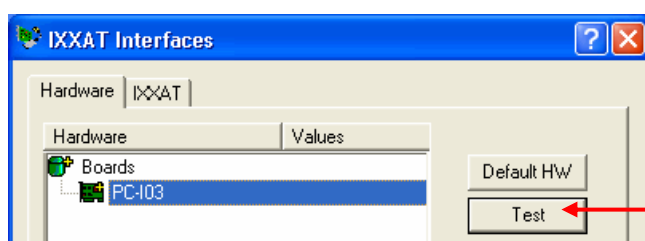


Figure 6.2-12: Test of the installed interface

6.2.2 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 must first be set on the board itself and in the bios.

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

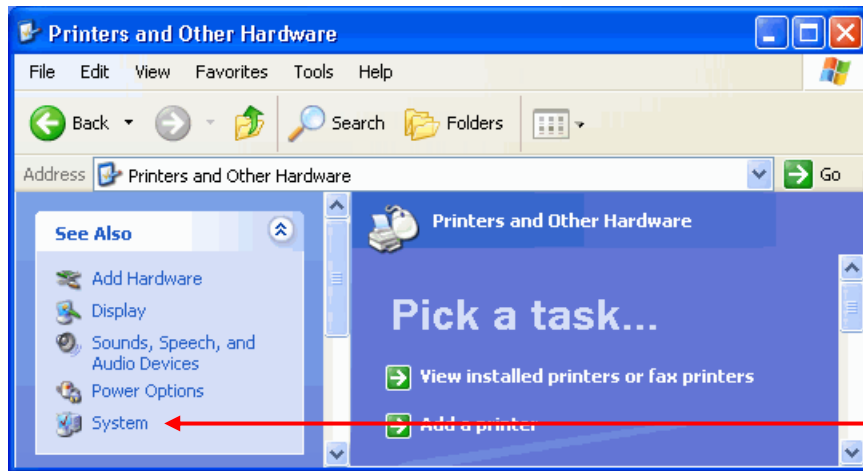


Figure 6.2-13: Starting the System Applet

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



Figure 6.2-14: 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.

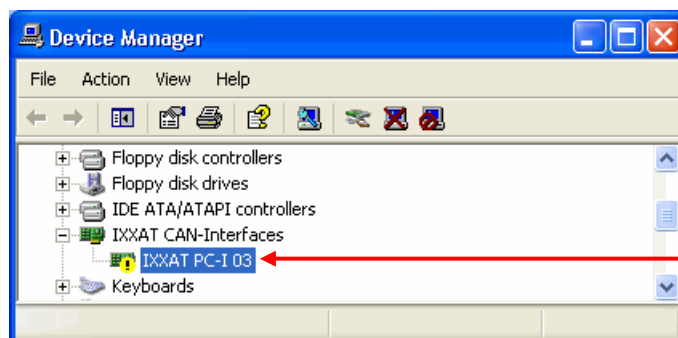


Figure 6.2-15: The Device Manager

- (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.

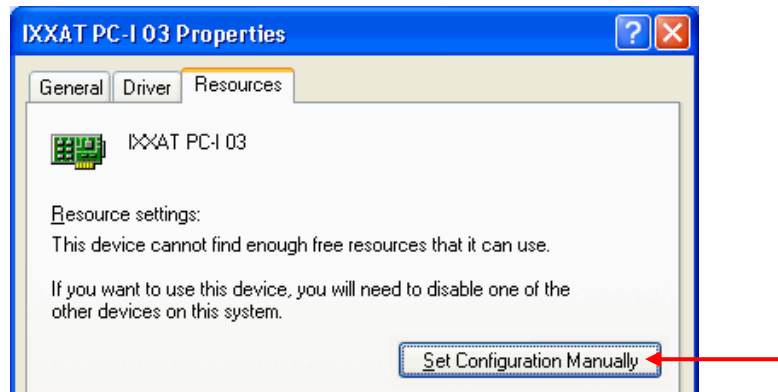


Figure 6.2-16: Notification about resource conflicts

- (5) Changing the settings:
Now you see the settings entered during the installation.
Set the resources according to the settings made by you on the PC/CAN-interface for address and interrupt.
Your alterations are adopted with "OK".

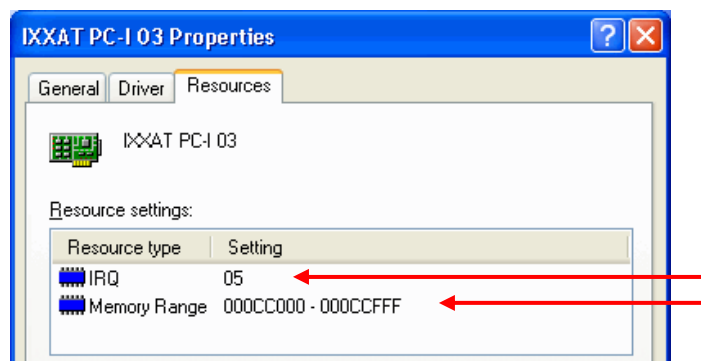


Figure 6.2-17: Adaptation of settings

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

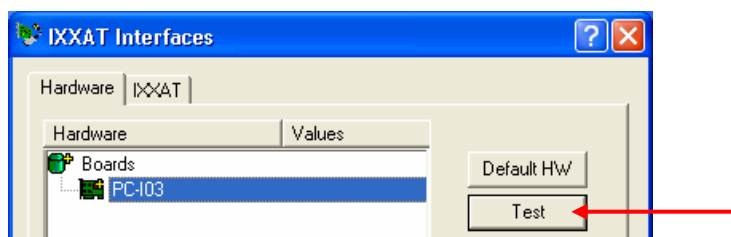


Figure 6.2-18: Test of the interface

6.3 Installation of CAN@net II

CAN@net II is 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”

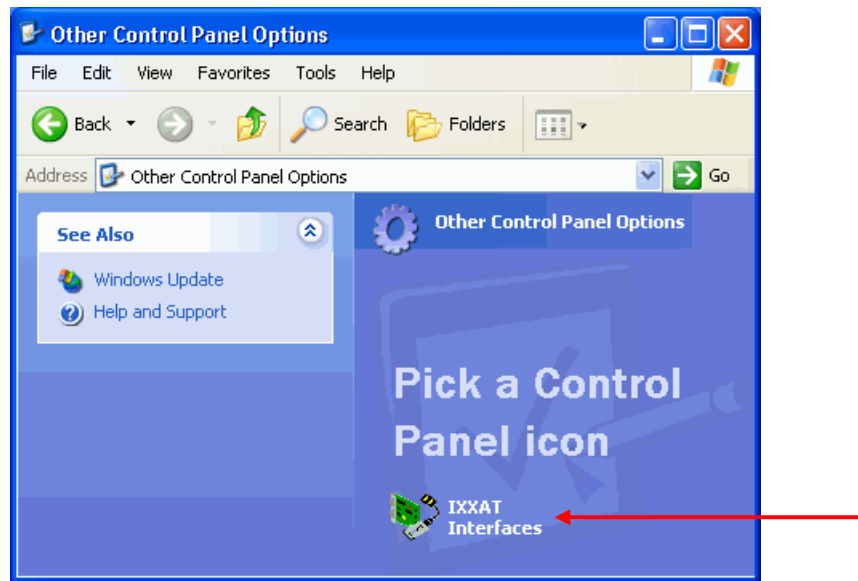


Figure 6.3-1: Starting the IXXAT Interfaces Applet

- (2) Click on the “Install” button in the applet in order to install new hardware.
- (3) A CAN@net II installation dialog appears after selecting “IXXAT CAN@net II Install”. Create a new configuration by clicking the “Add” button.

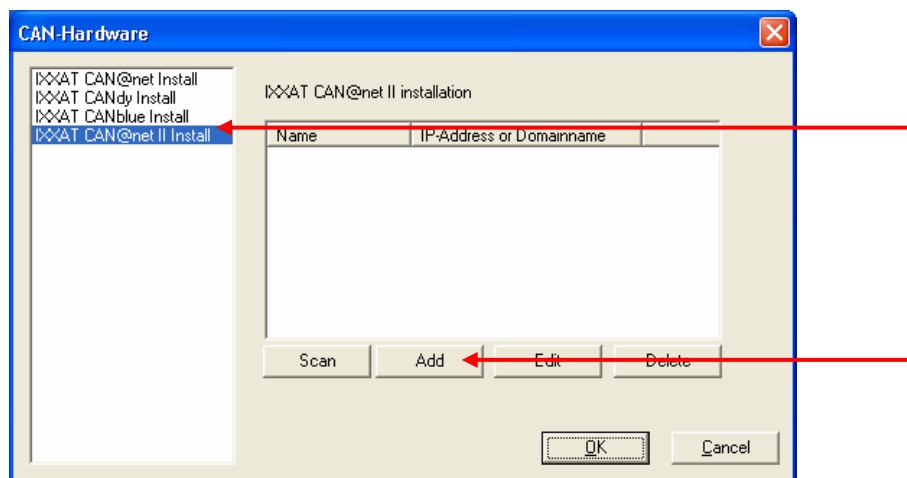


Figure 6.3-2: Installation of CAN@net II

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

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

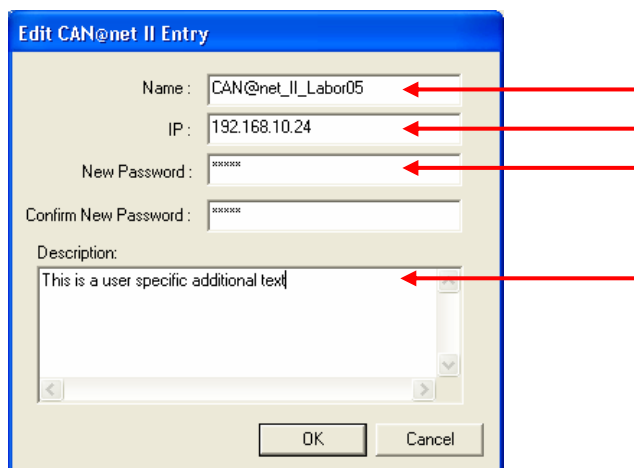


Figure 6.3-3: New CAN@net II configuration

! IP address and password are configurable via the CAN@net II Configurator (refer to CAN@net II Hardware Manual).

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

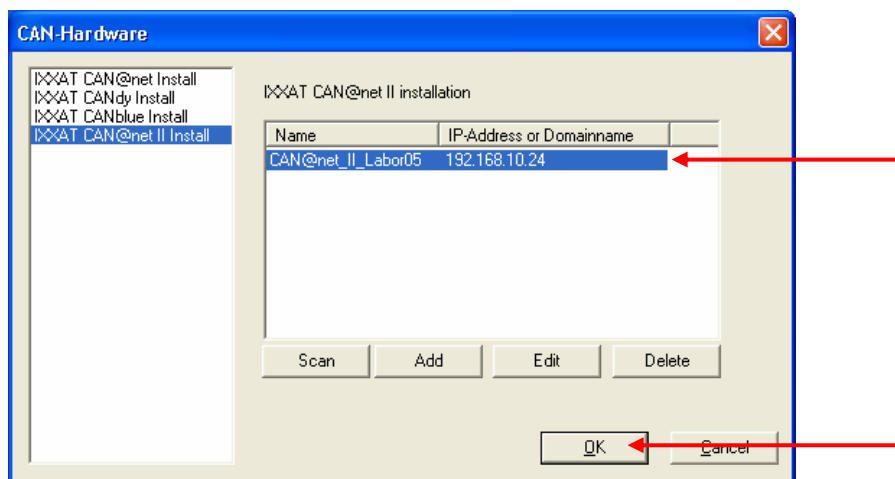


Figure 6.3-4: Installation dialog with new CAN@net II configuration

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 configured CAN@net II 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.

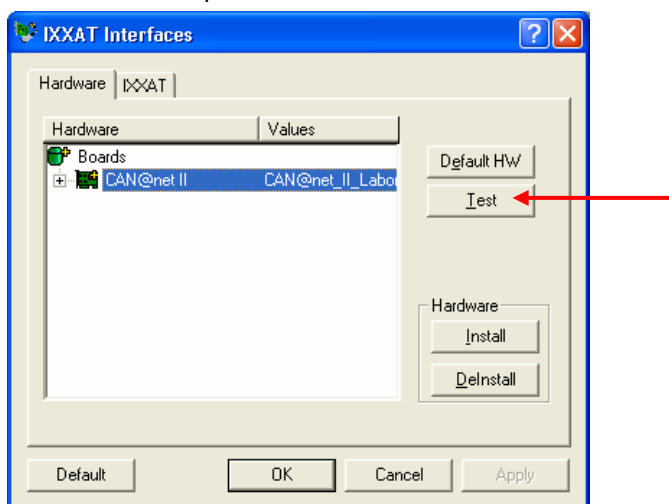


Figure 6.3-5: Applet after installation of the CAN@net II interface

6.4 Installation of CANblue

CANblue is installed via the IXXAT Interfaces Applet. For this, the VCI-driver software V2.18 must be previously installed. Additionally you need a previously installed Bluetooth adapter. IXXAT recommends using a Bluetooth adapter which supports the XP / Vista Bluetooth stack. The XP Bluetooth stack is included in the Service Pack 2 for Windows XP. If you use another Bluetooth stack, you have to set up the Bluetooth connection in a corresponding manner.

6.4.1 Set up Bluetooth connection

The following steps illustrate how to set up a Bluetooth connection using the XP Bluetooth stack.

- (1) Open the dialog “Bluetooth Devices” (Control Panel → Bluetooth Devices).

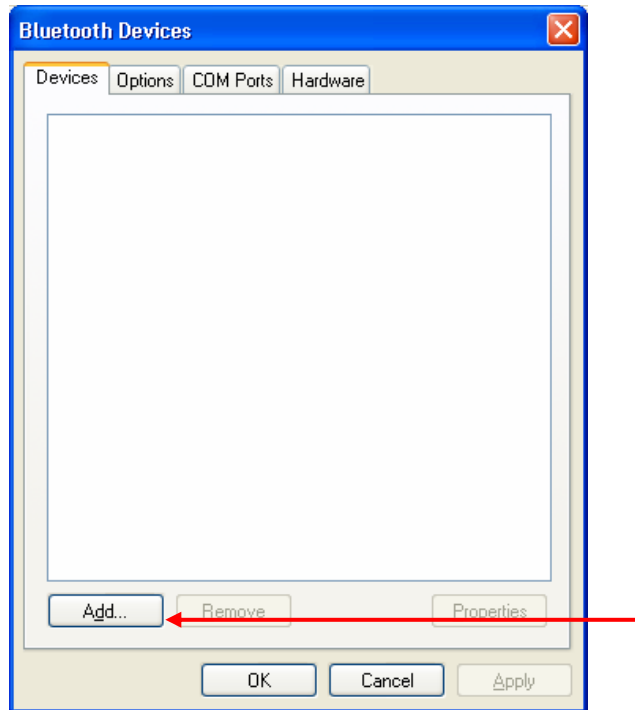


Figure 6.4-1: Bluetooth Devices – Add device

- (2) Click on "Add..." to open the dialog "Add Bluetooth Device Wizard" and select "My device is set up and ready to be found".



Figure 6.4-2: Add Bluetooth Device Wizard – Find device

- (3) All available Bluetooth devices will be displayed. Select the IXXAT CANblue (xxxxxxxxxxx) device which has to be configured. The field behind the name "(xxxxxxxxxxx)" shows the MAC address which is also shown on the back of the CANblue device.

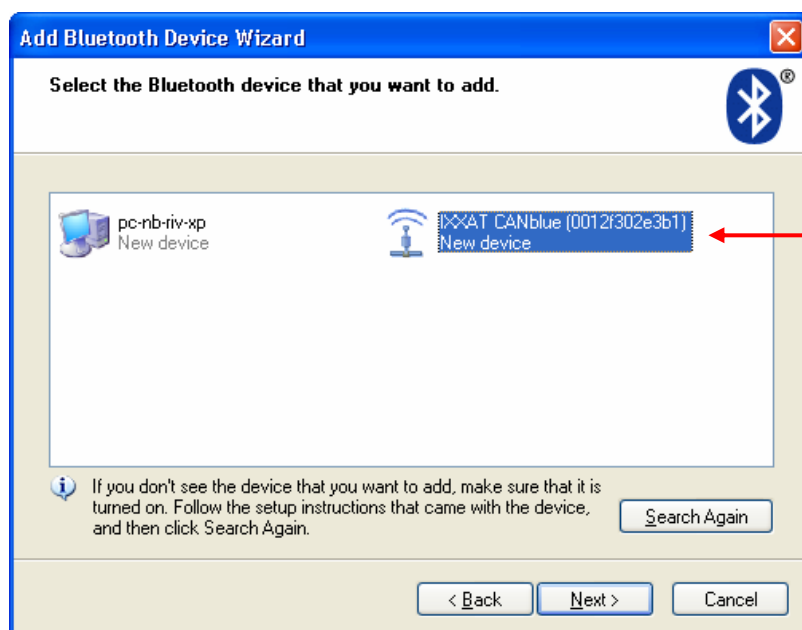


Figure 6.4-3: Add Bluetooth Device Wizard – Select device

- (4) Now you have to enter the **passkey** for the Bluetooth device. Therefore select "Use the passkey found in the documentation" and enter **7388**.

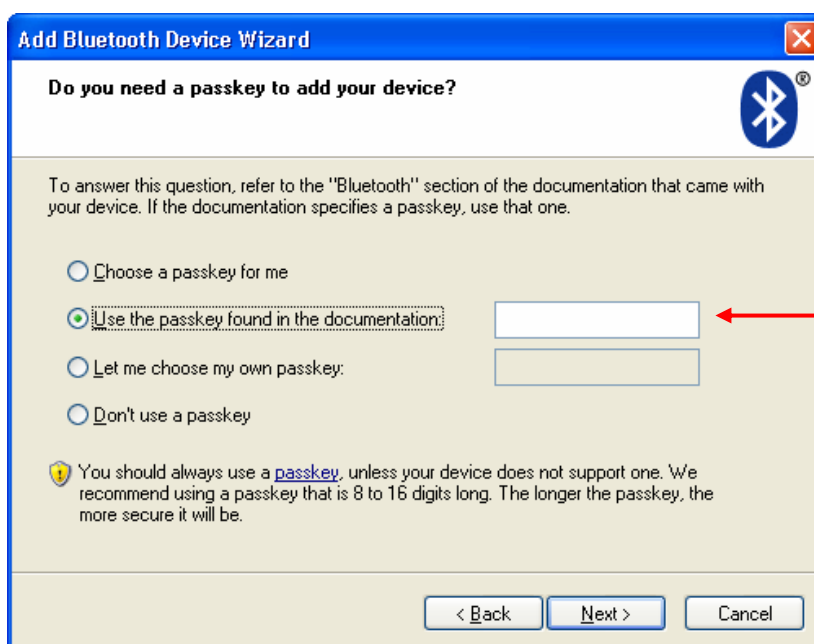


Figure 6.4-4: Add Bluetooth Device Wizard – Enter passkey

- (5) After entering the passkey the virtual COM ports of the CANblue device are shown. Memorize the number of the outgoing COM port.



Figure 6.4-5: Add Bluetooth Device Wizard – COM port

- (6) Click on "Finish" to close the dialog "Add Bluetooth Device Wizard". Herewith the set up of the connection is completed and the CANblue device appears in the dialog "Bluetooth Devices".

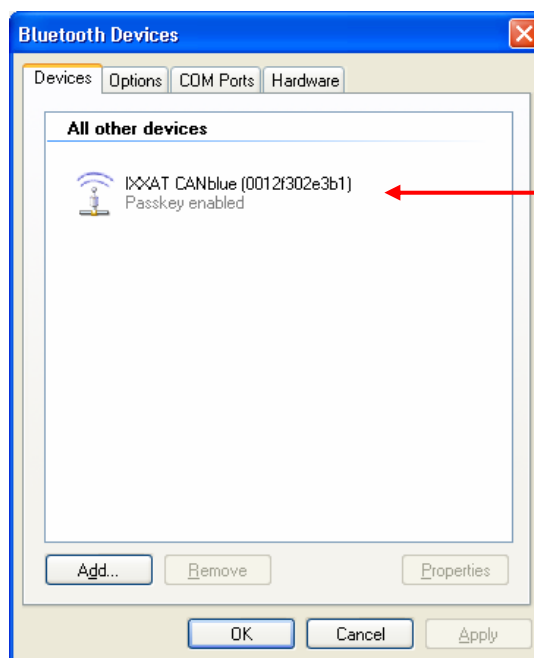


Figure 6.4-6: Bluetooth Devices – CANblue device

6.4.2 Installation of CANblue

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

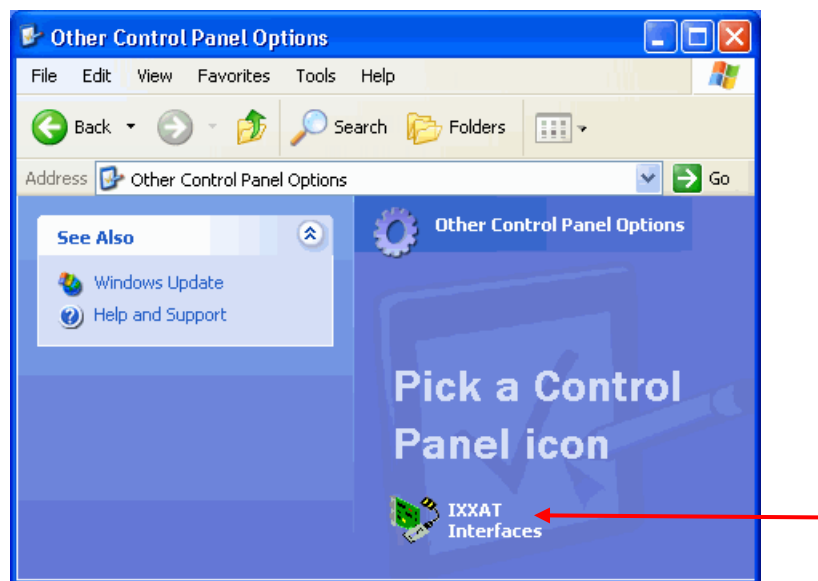


Figure 6.4-7: Starting the IXXAT Interfaces Applet

- (2) Click on the "Install" button in the applet in order to install new hardware.
- (3) A CANblue installation dialog appears after selecting "IXXAT CANblue Install".

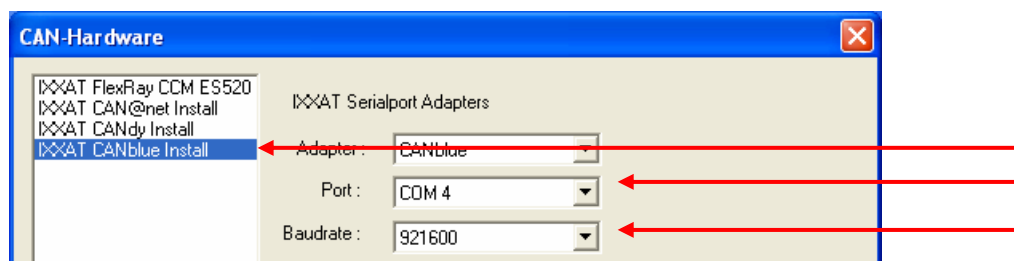


Figure 6.4-8: Installation of CANblue

- (4) Select the previously configured COM port (here COM 4), adjust to the highest baud rate supported by your Bluetooth stack (for the XP stack set 921,6 kBaud) and close the dialog with "OK".
- (5) The configured CANblue device now appears in the main window of the IXXAT Interfaces Applet. If the configured COM port is correct the access test via the "Test" button can be performed.

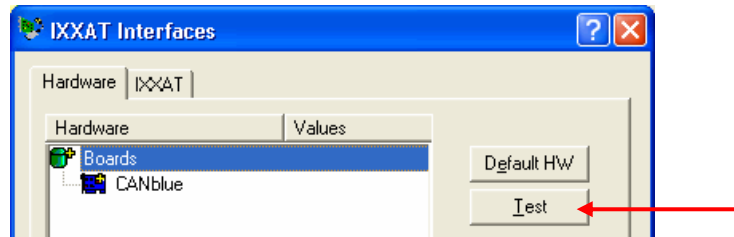


Figure 6.4-9: Applet after installation of the CANblue interface

7 Important information

7.1 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. This will require the password which you received with the information sheet enclosed with your hardware.
- (2) Uninstall the current VCI via the Applet "Add/Remove Programs" in the Control Panel.
- (3) Under Windows 2000/XP/Vista 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, 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 Windows 2000/XP/Vista. 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.

7.2 Plug&Play hardware installed prior to VCI-installation

If you have previously installed your IXXAT PCI-card under Windows 2000/XP/Vista, or if you have previously 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) Install the VCI. The required INF-files are installed together with the VCI.
- (2) Restart Windows. Your Plug&Play hardware is now detected and installed automatically.

7.3 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.