

BIANCA/BRI

for DOS and Windows 3.x

Quick Installation Guide

Version 3.1
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NOTE

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This manual provides a description of and instructions for the BinTec ISDN communications software from Release 3.1 for MS-DOS and MS-Windows 3.x.

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QUICK INSTALLATION GUIDE

BIANCA/BRI for DOS and Windows V.3.1

Welcome! This manual helps you to quickly install and configure your new BIANCA ISDN board and accompanying software.

First there is a short run-down of the different software packages included with your ISDN board.

The second section (from [page 3](#)) helps you gather the information needed to successfully install and configure your board.

Then the hardware configuration and installation (from [page 10](#)), followed by the software installation and configuration (from [page 17](#)) is described.

Once you have installed and configured the ISDN hard- and software according to this manual you do not need to make further adjustments in most cases. In some special cases, however, it can be necessary to adjust certain values by using the configuration program. In these cases please refer to sections “Die ISDN-Software” or “BIANCA/NDIS” of the manual.

The Software

BIANCA/BRI for DOS and Windows 3.x comprises the following programs.

- Installation and **Configuration programs**, as described in this manual. You can also later use the configuration program to change your configuration, if necessary.
- Board drivers for the BIANCA ISDN boards.
- CAPI¹ 2.0 and CAPI 1.1 as **DualMode-CAPI**—both interface versions are available at the same time. Many communications programs—including RVS-COM (see below)—use CAPI to access ISDN. CAPI 2.0 supports Euro-ISDN (DSS1), while CAPI 1.1 supports the first German ISDN standard (1TR6). It is possible to use **V.42bis data compression** on both B channels simultaneously.
- **BIANCA/NDIS²** can be used to connect your computer to a TCP/IP network via ISDN. BIANCA/NDIS supports most current TCP/IP stacks, such as Microsoft TCP/IP-32, or OnNet PC/TCP.
- **RVS-COM** for Windows 95 (Lite Version) is an application that runs using the CAPI interface and provides various telecommunications services, such as T-Online (formerly Btx or Datex-J), Fax, Voice Mail, and Eurofile-transfer.



If you want to use RVS-COM lite we suggest that you install our Windows 95 software (see *BIANCA/BRI for Windows 95 – Getting Started* for details).

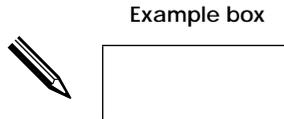
You have to install the BIANCA/BRI software before you can install RVS-COM. Complete instructions can be found in the online documentation included on the disks.

-
1. Common ISDN Application Program Interface, standard software interface for ISDN applications.
 2. Network Device Interface Specification, Microsoft Standard for using network adapters with communications software.

Preparing the Installation

Before installing your new ISDN board and software you should read the following section and note down the data necessary for your installation.

We supplied empty boxes at crucial points for you to write down the values for your installation, so you have them handy when needed.



ISDN Protocol

Depending on the type of your ISDN subscriber outlet you have to select a suitable ISDN D channel protocol profile. There are a couple of selection criteria which are described in detail in section “Manual Configuration” below.

Autoconfiguration

There is, however, the Autoconfiguration mode—selected by the D channel protocol profile *auto*—which finds out most important parameters on its own.



Note that the Autoconfiguration feature only works with boards properly connected to the ISDN.

If you select the D channel protocol profile *auto* your PC will try to find out the following parameters every time the ISDN board is loaded (e.g. every time you switch on or reset your PC):

- D channel protocol profile (e.g. DSS1, 1TR6, NI1)
- Type of connection (Point to Multipoint or Point to Point)

- TEI assignment (automatic or fixed; in case of “fixed” the used TEI value is also determined)
- Use of X.31 in the D channel (yes or no)

These parameters are then used until the next reboot.

This procedure also enables you to alternately use your ISDN board with different ISDN types (e.g. EuroISDN and 1TR6 in Germany) without having to adapt the configuration file `BIANCA.CFG` for each change.



If you want to use programs which need the CAPI 1.1 interface and do not have a German ISDN connection according to 1TR6 you will have to provide a mapping of your multiple subscriber numbers (MSN) to (some of) the Endgeräteauswahlziffern (EAZ) used by 1TR6 (and CAPI 1.1, which is based on 1TR6) even when using the Autoconfiguration feature (see pages [6](#) and [18](#)).

The EAZ-MSN mapping is only needed for CAPI 1.1 and BIANCA/NDIS. CAPI 2.0 uses the whole telephone number to identify calls.

If the Autoconfiguration is unable to determine any parameters the `u_dss1_pmp` D channel protocol is used (EuroISDN, Point to Multipoint).

Manual Configuration

You can, of course, also select the D channel protocol manually, e.g. if you want to use your ISDN board with a single ISDN subscriber outlet.

The D channel protocol used depends on several factors:

The type of your ISDN subscriber outlet:

Basic rate interface (BRI)—either for Point to Multipoint or for Point to Point protocols—or Primary rate interface (PRI or PMX).

The type of ISDN used on your subscriber outlet:

This usually depends your ISDN provider. If you are

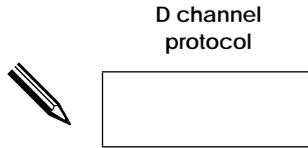
uncertain as to which ISDN type is used on your subscriber outlet (e.g. DSS1, NET3, 1TR6, etc.) please contact your ISDN provider.

The BIANCA ISDN software supports the following D channel protocols:

D channel protocols for Basic rate interfaces (BRI)		
Protocol	ISDN Type	Short description
<i>auto</i>	all	Autoconfiguration
<i>u_dss1_pmp</i>	DSS1	Point to Multipoint, Euro-ISDN
<i>u_dss1_pp</i>	DSS1	Point to Point, Euro-ISDN
<i>u_1tr6_pmp</i>	1TR6	Point to Multipoint Protocol (D)
<i>u_1tr6_pp</i>	1TR6	Point to Point Protocol (D) (NT2 connection)
<i>u_swiss_pmp</i>	NET3/CH	Point to Multipoint Protocol (CH)
<i>u_net3_pmp</i>	NET3	Point to Multipoint Protocol (e.g. UK)
<i>u_ni1_pmp</i>	National ISDN 1	Point to Multipoint Protocol (USA)
<i>u_vn3_pmp</i>	VN3	Point to Multipoint Protocol (F)

D channel protocols for Primary rate interfaces (PMX)		
Protocol	ISDN Type	Short description
<i>auto</i>	all	Autoconfiguration
<i>u_dss1_s2m</i>	DSS1	S _{2M} Protocol for Euro-ISDN
<i>u_1tr6_s2m</i>	1TR6	S _{2M} Protocol for ISDN 1TR6 (D)
<i>fv_b30</i>	–	S _{2M} Leased line, 30 B channels (64 Kbit/s each), back to back
<i>fv_b1</i>	–	S _{2M} Leased line, 1 B channel (1.9Mbit/s), back to back
<i>n_1tr6_s2m</i>	1TR6	S _{2M} board acts as an exchange (only for use with a PBX)
<i>n_dss1_s2m</i>	DSS1	same as above, but Euro-ISDN S _{2M}

Note down your ISDN D channel protocol.



EAZ Mapping

CAPI 1.1 and NDIS are based on the “old” national German ISDN according to 1TR6.

If you do not have a German ISDN connection according to 1TR6 (e.g. EuroISDN) the software manages the biggest part of the necessary protocol translations for you.

You will, however, have to provide a mapping of your multiple subscriber numbers (MSN) to (some of) the *Endgeräteauswahlziffern* (EAZ) used by 1TR6.



If you only want to use CAPI 2.0 applications (no CAPI 1.1 and no NDIS software) you do not need an EAZ Mapping.

Endgeräteauswahlziffer (Terminal Selection Digits)

In the 1TR6, the last digit of the telephone number is designated EAZ (Endgeräteauswahlziffer, terminal selection digit). As the name indicates, this number serves for the selection between various connected devices (e.g. telephone1, telephone2, FAX or computer) at a multiple device extension. The BinTec software uses the EAZs in order to select various ISDN data utilities, such as data transfer via IP, FAX, etc.

In the 1TR6, each ISDN terminal features 10 EAZs (0 to 9), while in the Euro-ISDN you usually receive only three multiple call numbers that can differ from each other in more than just the last digit.

Normally, the *last four* digits of your MSNs are sufficient for an unambiguous differentiation.

At an additional charge you can also order more telephone numbers or the subaddressing feature from your

ISDN provider.

Note down a separate EAZ (digit from 0 to 9) for each of your MSNs (and, if necessary, Subaddress).

BIANCA/NDIS

The following parameters are only required for establishing IP connections over ISDN with BIANCA/NDIS and a TCP/IP stack. Otherwise, please continue with “Interrupt Settings” on page [10](#). The BIANCA/NDIS settings consist of your local system’s parameters and the parameters for each communications partner.

Local System Parameters

For your local system there are a maximum of six parameters depending on which applications you will be using.

First decide how many of your available ISDN B-channels BIANCA/NDIS may use. If you enter a number smaller than the number of ISDN channels, then the leftover channels will be made available to other applications (i.e. for use with BIANCA/COM or for incoming calls).

Max B Channels
for NDIS



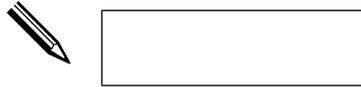
Write down the IP address your computer can be reached at over ISDN. Please note that this address must be unique, i.e. you can’t use a number already assigned to a host on your LAN.

IP Address



If you want to use PPP, your computer will also require a special name, or “PPP-ID” which will be used by the PPP protocol to identify your system at connection time. Your computer’s PPP-ID may be up to 16 characters long.

Local PPP ID



To use X.25 an X.121 address and a NUI¹ is also required. Normally these are assigned by your local ISDN provider.



X.121 Address	NUI

The last parameter is your ethernet address. In most cases this default setting provided by NDIS can be used.

The only exceptions are the *Norton Administrator* and *HP-Software-Distribution* software packages. These management tools use the ethernet MAC address for distributing, identification, and registration of software.

Communications Partner Parameters

You will need a set of parameter settings for each communications partner. A communications partner is literally each computer you wish to establish TCP/IP connections over ISDN with. Please write down the parameter settings for all communications partners on a separate piece of paper.

The following settings are required:

1. Unique Partner Name.
2. Partner’s IP Address

1. Network User Identification

3. A telephone number where your partner can be reached at (for outgoing calls) and a telephone number from which your partner normally calls from (will be used for identifying incoming calls).

Please note that the numbers for incoming and outgoing calls may be different if a PBX is connected to your subscriber outlet.

4. The EAZ for incoming calls (see page 6).
5. The desired ISDN service. The available services are as follows:

ISDN telephony	X.25 service (UC 8)
Analog telephony	X.25 service (UC 9)
a/b services	X.25 service (UC 10)
Facsimile group 2/3	X.25 service (UC 11)
Facsimile group 4	X.25 service (UC 13)
BTX	X.25 packet mode (X.31 Case B)
<i>Data transfer</i>	

If you need a different service you can also specify a valid combination of Service Indicator and Additional information (see Help Functions or Appendix C of your handbook).

6. The B-channel protocol to use. The following protocols are supported:

X.75 SLP (LAP-B)
HDLC (raw CRC frames)
UIFRAMES
X.25 packet layer protocol
T.70 network layer
CISCO HDLC encapsulation

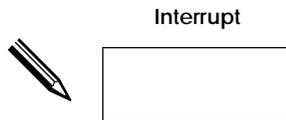
<i>PPP (point to point protocol)</i>
PPP asynchronous
PPP analog modem V.22bis (2400 Baud)
PPP asynchronous 38400 Baud V.110
PPP asynchronous 19200 Baud V.110
PPP asynchronous 14400 Baud V.110
PPP asynchronous 9600 Baud V.110
PPP asynchronous 4800 Baud V.110
PPP asynchronous 2400 Baud V.110
PPP asynchronous 1200 Baud V.110

When using PPP your computer's PPP-ID, the PPP Password for your partner, and the type of authentication (CHAP¹, PAP² or both) to use are also required.

When using X.25 you will need a valid X.121 address.

Interrupt Settings

Each BIANCA ISDN board needs an interrupt of its own. The boards are preconfigured with IRQ 10. If this interrupt is already used in your PC you have to find a free one from the following: 3-7, 9-12, 14 and 15.



If you want to install more than one BIANCA ISDN board in your PC please note that each board needs a different free IRQ of its own.

-
1. Challenge Handshake Authentication Protocol
 2. Password Authentication Protocol

BIANCA/BRI and BIANCA/BRI-SLC

Setting the interrupt (IRQ) and memory address is identical for the BIANCA/BRI and BIANCA/BRI-SLC boards.

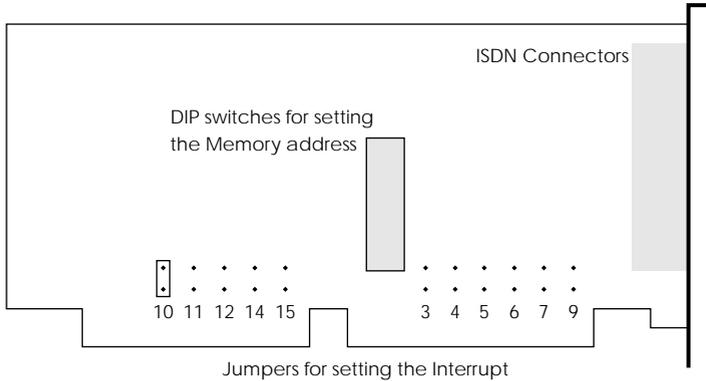
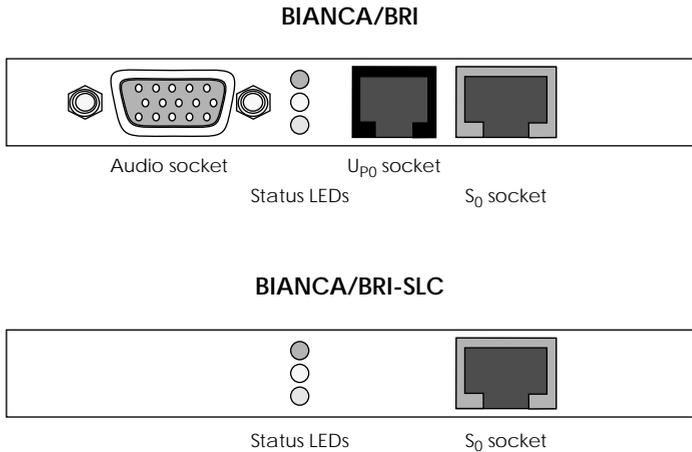


Figure 1: Schematic representation of Interrupt jumper and DIP switch locations on the BIANCA/BRI and BIANCA/BRI-SLC boards.

Set the interrupt by fitting the jumper on the appropriate pair of pins, as shown in [Figure 1](#).

Connectors on the backplane of the ISDN boards are as follows:



BIANCA/PMX

The S_{2M} adapter BIANCA/PMX consists of a main board with four extension slots and up to four communications modules.

The standard configuration comprises the main board—on which you set the interrupt and memory address—and one S_{2M} module (please note, that the jumpers $J4$ and $J5$ *must* remain in the positions depicted in [Figure 2](#)).

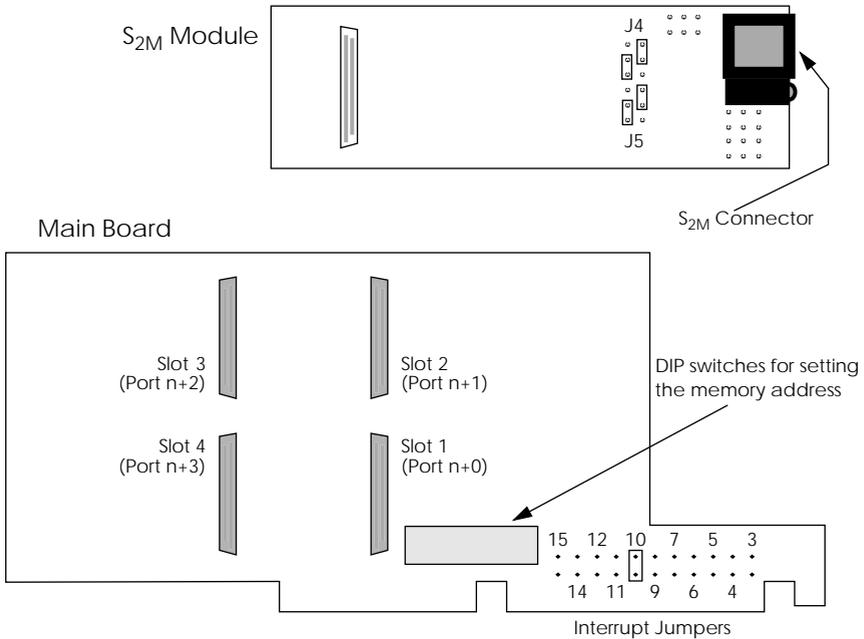


Figure 2: Schematic representation of Interrupt jumper and DIP switch locations on the BIANCA/PMX main board and S_{2M} module.

If you need to use a different interrupt than the default setting (IRQ 10), please fit the jumper on the appropriate pair of pins, as shown in [Figure 2](#).

Pin Assignment of the S_{2M} Connector

The pin assignment of the S_{2M} interface of newer S_{2M} modules (indicated by “**Prime/two rev: 1.5**” near one corner of the module) differ from those of older ones (indicated by “**Prime/two**”), because the relevant norm (IEC 10173) was issued *after* the development of the first set of modules.

The correct pin assignment is given in [Figure 3](#) below.

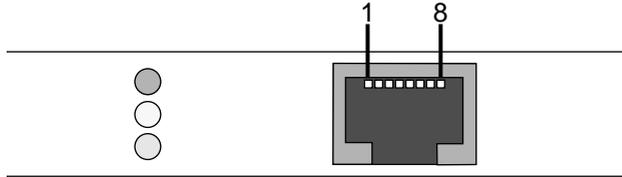


Figure 3: Pins of the S_{2M} Connector

Pin	Function
1	Receive, NT to TE (+)
2	Receive, NT to TE (-)
3	Not used
4	Transmit, TE to NT (+)
5	Transmit, TE to NT (-)
6-8	Not used



Be careful *not* to connect a 10Base-T (twisted pair) ethernet cable to the S_{2M} socket, since this may cause damage to your ISDN board or ethernet bridge.

Memory Address Settings

In order to exchange data with your PC each BIANCA ISDN board needs a separate memory area in the PC’s memory, which must not be used by any other board or application. The

BIANCA/BRI and BRI-SLC boards need 16kB, while the BIANCA/PMX uses 64kB of memory.

The memory address is set with 10 DIP switches.



If you want to install more than one BIANCA ISDN board in your PC please note that each board needs a different free memory area of its own.

BIANCA/BRI and BIANCA/BRI-SLC

Miniature switches S1..S6 are sufficient for the memory areas that can be used by a DOS PC. The remaining switches must be set to “on” position.

The switches are numbered from 1 to 10, the *on* and *off* positions are also clearly marked.

The DIP switch settings for the most common memory addresses are given in the table below.

Address	Switch 1 .. 10	Address	Switch 1 .. 10
0x0C000	on off	0x0D800	on off
0x0C400	on off	0x0DC00	on off
0x0C800	on off	0x0E000	on off
0x0CC00	on off	0x0E400	on off
0x0D000	on off	0x0E800	on off
0x0D400	on off	0x0EC00	on off

As a default the boards are set to address 0x0D400, which represents the memory area from 0x0D400 to 0x0D7FF. You

should only choose a different address if this memory area is already used in your PC.



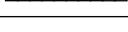
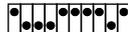
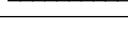
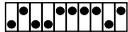
Carefully set the DIP switches to the position corresponding to the chosen address (see table above). If for some reason you need to set the board to an address not shown in the table, please refer to section “Hardwareinstallation” of the manual.

BIANCA/PMX

The BIANCA/PMX board needs a memory area of 64kB, therefore the DIP switch settings differ from those for the BRI and BRI-SLC board. On the PMX boards the address is set with switches 1 to 8, switch 9 has to remain “off”, switch 10 has to remain “on”.

The switches are numbered from 1 to 10, the *on* and *off* positions are also clearly marked.

The DIP switch settings for the most common memory addresses are given in the table below.

Address	Switch 1 .. 10	Address	Switch 1 .. 10
0x0C000	on  off 	0x0E000	on  off 
0x0D000	on  off 	0x0F000	on  off 

As a default the boards are set to address 0x0D000, which represents the memory area from 0x0D000 to 0x0DFFF. You

should only choose a different address if this memory area is already used in your PC.



Carefully set the DIP switches to the position corresponding to the chosen address (see table above). If for some reason you need to set the board to an address not shown in the table, please refer to section “Hardwareinstallation” of the manual.

BIANCA ISDN Adapter Installation

If there are no other adapters installed in the computer at the memory address and interrupt set on your BIANCA board, follow these steps to install the ISDN board:

1. Turn your computer off, pull the mains plug and open the case according to the manufacturer’s instructions.
2. Check that the correct address and interrupt are set on the adapter.
(For PMX adapters: check if the jumpers are set on the S_{2M} module as in [Figure 2](#). Plug the S_{2M} module onto the main board. Start with Slot 1.)
3. Insert the board into an empty slot.
4. Connect the ISDN board to your ISDN subscriber outlet with the cable shipped with your product.
5. Close the case, switch your computer on and continue as described in the following sections.



Connecting a VGA monitor to the audio interface during operation can cause damage to the BIANCA/BRI board and to the monitor.

Installation and Configuration of the Software

To easily install and configure the BIANCA/BRI software you will need Microsoft Windows 3.x.

If you only use DOS the configuration options from the software are more limited. You will find hints on installing the software from DOS in a later section.

Installation from Windows 3.x

Start Microsoft Windows. Make a backup copy of the installation disks. Store the original disks in a safe place and install the software from the backup copies.



BinTec Communications GmbH will take no liability for lost or damaged original disks.

Insert disk 1 into your drive. Select *Run...* from the *File* menu of the program manager, and enter *a:\setup*. Setup will now start the InstallShield Wizard, which will guide you through the installation process.

You can interrupt the installation at any time by clicking on the *Cancel* button.

Setup suggests *C:\BIANCA* as a path to install the software. If possible, use this path.

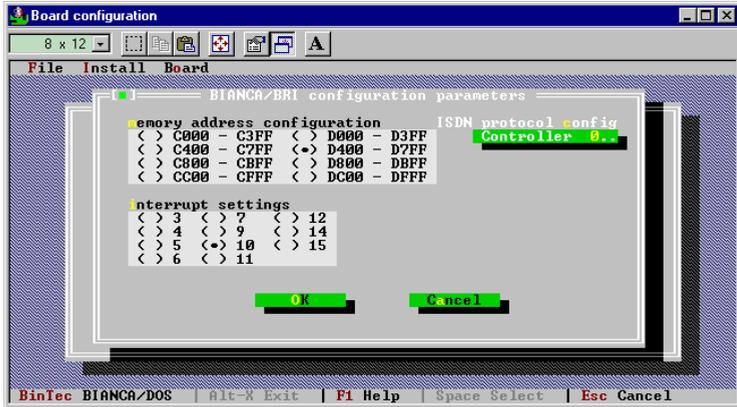
Setup invokes the board configuration program once the installation process is completed.

Board configuration

The board configuration program first creates the batchfiles *STARTUP.BAT* and *DOWN.BAT* for starting and stopping the BIANCA ISDN software. It then modifies your *AUTO-EXEC.BAT* file, so that the ISDN software is automatically started when you switch on your computer.

The program now offers you to add a board (Add BRI means both BIANCA/BRI and BIANCA/BRI-SLC boards). By clicking

on the appropriate board type you will get a dialog box, where most basic settings of the board can be entered.



Here you can enter the memory address and interrupt you noted down earlier.

You then have to select the ISDN protocol suitable for your subscriber outlet. To do this click on the *Controller x..* button.



If you do not have german ISDN according to 1TR6 *and* want to use CAPI 1.1 or NDIS applications, you also have to enter an EAZ mapping here.

In most cases no further adjustments are needed.

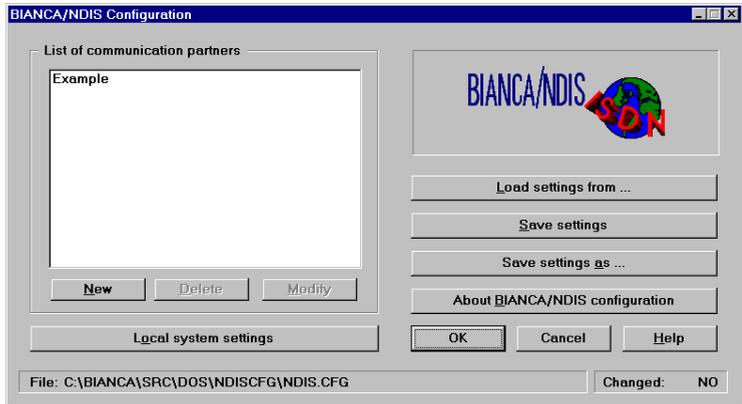
Configure all your ISDN boards in this way.

After you configured all of your ISDN boards, click on the *Continue* button and leave the program using the *Exit* field at the bottom of your screen.

NDIS Configuration

Now you can configure BIANCA/NDIS. This is only necessary if you want to use TCP/IP connections via ISDN.

If this is not the case, please proceed as described in section [Finishing your Configuration](#) on [page 22](#).



From the main NDIS configuration window you can reach the *Communications Partner* and *Local System Settings* dialog boxes as well as load and save your configuration files.

Local System Settings

First enter the parameters for your system in the *Local System Settings* dialog.

The screenshot shows the 'BIANCA/NDIS Configuration' dialog box with the 'Local system settings' tab selected. The dialog contains the following fields and options:

- Max. number of B channels to use:** A text box containing the value '2'.
- Local IP address:** Four text boxes containing the values '200', '200', '200', and '1' respectively.
- X.25 protocol settings:**
 - X.121 address:** An empty text box.
 - NUI:** An empty text box.
- PPP protocol settings:**
 - Local PPP ID:** A text box containing the value 'msdospc'.
- Ethernet address:** A text box containing the value '00A0F9000001'.
- ISDN controller settings:**
 - Enable use of controller number:** A grid of 16 checkboxes, all of which are checked, labeled from 0 to 15.

At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

Enter the number of B channels to maximally be used simultaneously for NDIS connections (from 1 to 15; be sure not to enter a greater number than B channels are physically available).

Enter your IP address in the Local IP address fields.

You only need to enter the PPP and X.25 protocol settings if you want to use these services.

You do not need to change the Ethernet address setting (for exceptions see [page 8](#)).

Select only those ISDN controllers, which should be used by BIANCA/NDIS.

Communication Partner Settings

Select the Example partner in the NDIS configuration main window and click on Modify to adapt it to your applications, or click on New to configure a new partner from scratch.

The screenshot shows the 'BIANCA/NDIS Configuration' dialog box with the 'Communication partner settings' tab selected. The 'Example' partner is configured with the following settings:

- Partner name:** Example
- Partner IP addr.:** 192, 123, 123, 123
- ISDN settings:** Service: Data transfer; Service indicator / add. info: 7 / 0
- Establish calls:** Establish calls, Accept calls, Callback
- Profile to use for this partner:** Default
- Protocol for this partner:** 64 Kbit/s, 56 Kbit/s; PPP (point to point protocol)
- Phone numbers:**

Number	Direction
0091196730	In
091196730	Out
- Protocol-specific settings:** Partner PPP ID: Example; Partner PPP password: secret
- Authentication:** CHAP, PAP, No calling line ID check

Supply the partner with a name and enter its IP address. Then select whether you want to Establish Calls to this partner, or Accept Call from this partner, and if so, if you want to use the Callback feature (disconnect the incoming call, and call back the partner).

You do not need to change the profile setting.

Enter the phone number(s) for this partner. For each number, please select whether it is used with incoming or outgoing calls, or both.



Please note that the numbers for incoming and outgoing calls may differ, especially when you are connected to the ISDN via a PBX and outgoing calls need a prefix number, such as 0.

If the partner can be reached with several different numbers, and a call setup fails—e.g. because that line is busy—a new call setup attempt is made with the next number from the list, and so forth.

The *Local Phone Number*, or EAZ, specifies which of your telephone numbers is used by BIANCA/NDIS for incoming TCP/IP calls. This should be the same number for all partners.

You do not need to change the ISDN service field. The default setting *Data Transfer* can be used for most applications.

Finally, choose a B channel *Protocol for this Partner*. With some protocols you need to make additional Protocol-specific settings, which can be entered in the lower right section of the dialog.



Before you can establish IP connections via ISDN using BIANCA/NDIS you have to configure your TCP/IP stack software (e.g. Microsoft TCP/IP or OnNet PC/TCP) to use BIANCA/NDIS as a driver.

You can only do this after your BIANCA/NDIS configuration is complete and you rebooted your computer.

From page [24](#) on we provide an explanation of how to configure Windows 3.x and Windows 95 to work with BIANCA/NDIS.

Finishing your Configuration

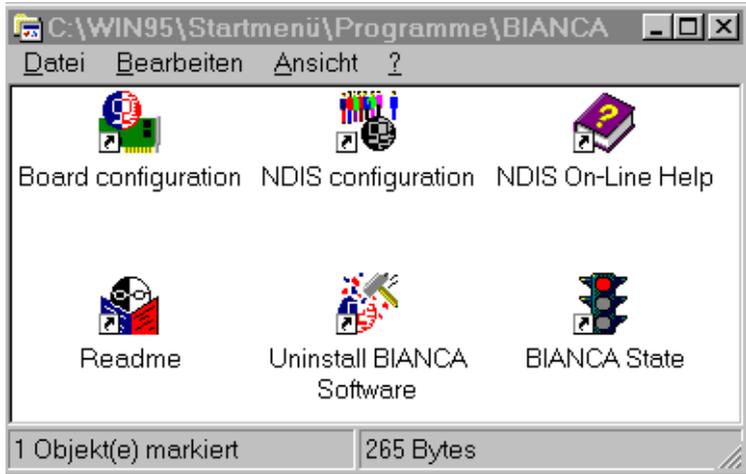
After you made all the configuration settings necessary for your system you have to reboot your PC so the configuration can take effect.

So at this point you should accept the “Restart Computer” option offered by the software. Remove any diskette from your drive and click on “Finish” to reboot your computer.



You can, of course, later modify and extend the configuration using the *Board configuration* and *NDIS configuration* programs.

After a reboot of your PC you can start to work with your BIANCA ISDN software. Windows now offers you the Program group *BIANCA*, which contains the ISDN software.



Deinstallation of the Software

You can completely remove the BIANCA ISDN software by starting the *Uninstall BIANCA Software* program.



The automatic deinstallation only works correctly if you rebooted your computer at least once after installing the software.

If you are using BIANCA/NDIS with a TCP/IP stack software you have to undo the configuration entries made for their cooperation before uninstalling the BIANCA ISDN software (see [page 28](#)).

To uninstall the software simply start the *Uninstall BIANCA Software* program from the *BIANCA* program group.

This program removes all the files from your harddisk which have been copied there during the installation process,

and will also reset all system files (e.g. AUTOEXEC.BAT) to their pre-installation state.

Of course the uninstallation program also removes itself and the BIANCA program group.

Installation without Windows

You should only install the BIANCA ISDN software from DOS if you do not have Windows installed on your computer. The installation from DOS has some disadvantages over the Windows installation—e.g. the NDIS configuration program only runs under Windows, so you will then have to configure NDIS manually.



Only install the software from DOS if no Windows is available.

Installing the software under DOS is explained in the manual from page 3-22, section “Installation ohne Windows”.

Using BIANCA/NDIS under Windows 3.x

In this section we explain how to set up your Windows system and your TCP/IP stack software (e.g. Microsoft TCP/IP-32) so they support BIANCA/NDIS.

- From *Main* start the *Windows Setup* and then from the *Options* menu select “Change Network Settings...”.
- Click on “Networks...” and select “Install Microsoft Windows Network” and “No additional Network”. Confirm this choice with *OK*.
- Now select “Drivers...” and “Add Adapter...”. Double-click on “Uninstalled or Updated Network Adapter” and enter the install path of your BIANCA software (usually C:\BIANCA). Click on the *OK* button and select “BIANCA/NDIS ISDN IP Driver”.



For the following step you will need the installation disks of your TCP/IP software.

- Add your TCP/IP stack in the Network Drivers dialog (under “Unlisted or Updated Protocol”) and afterwards delete the “Microsoft NetBEUI” and “IPX/SPX Compatible Transport with NetBIOS” entries.



BIANCA/NDIS supports only the TCP/IP protocol.

- Click on the new protocol and set it as Default Protocol.
- Leave the Network configuration. As a final step you have to configure your TCP/IP stack software to use the same IP address you supplied when configuring NDIS.
- Reboot your computer. BIANCA/NDIS is now ready to go.

Using BIANCA/NDIS under Windows 95

The BIANCA ISDN software contains the Windows 95 script file BIANCA.INF, which is copied to the WINDOWS\INF directory during the installation.

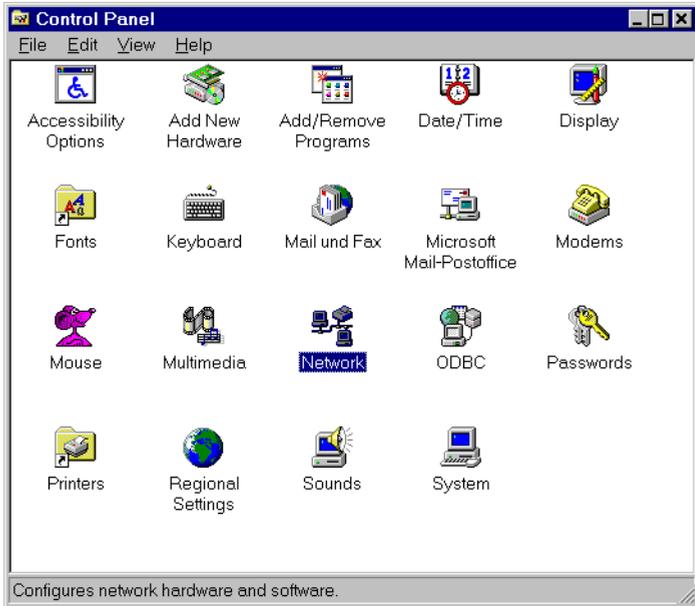
The script adds BinTec Communications to the list of network adapter manufacturers in the Windows 95 network configuration page.



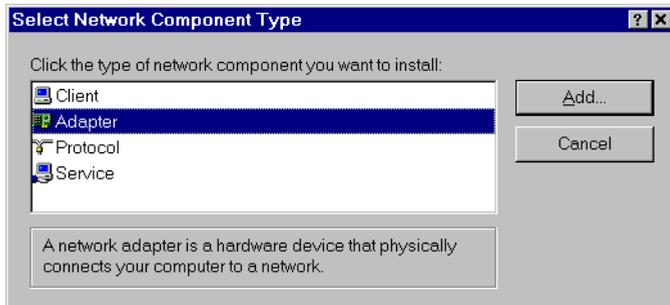
If you use Windows 95—and do not use Windows 3.x on the same computer—we suggest that you use our Windows 95 software (see *BIANCA/BRI for Windows 95 – Getting Started* for details).

You can only select the BIANCA/NDIS driver under Windows 95 *after* you successfully installed the BIANCA ISDN soft-

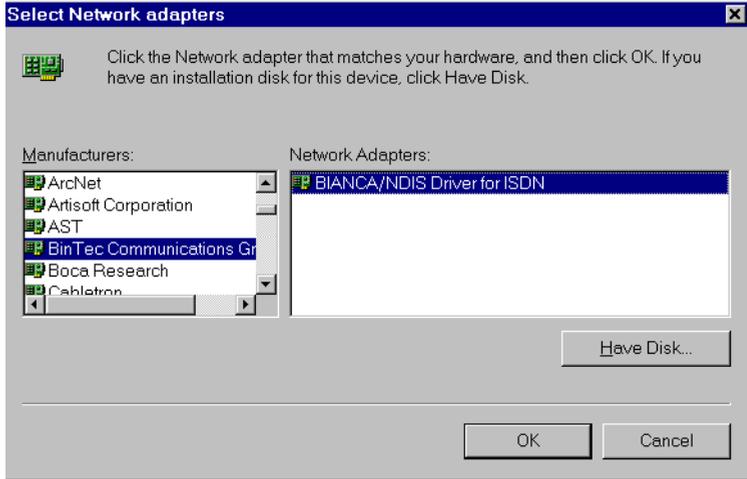
ware. To do so, first start the *Control Panel* from the *My Computer* window.



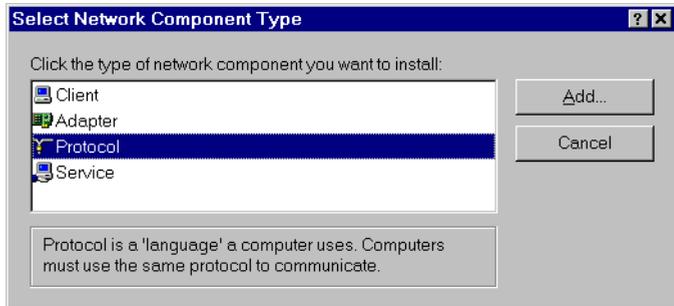
From here start the *Network* configuration. Select *Add*. Now click on *Adapter* in the *Select Network Component Type* dialog and then *Add* again.



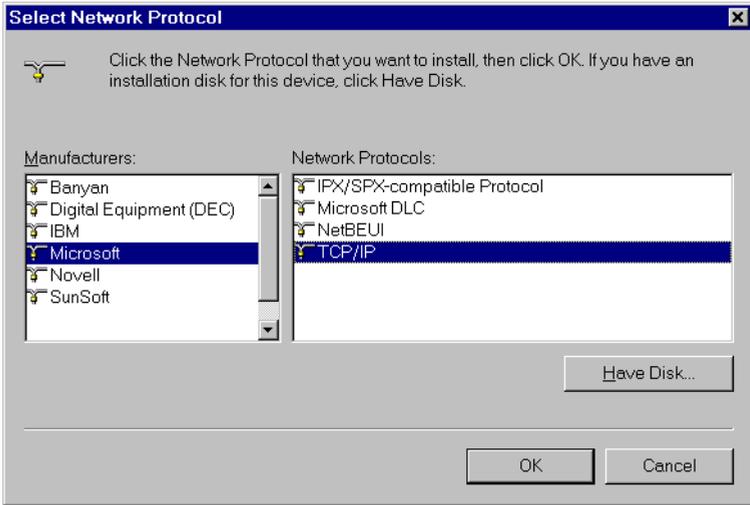
In the next dialog select *BinTec Communications* as a manufacturer and confirm your choice with *OK*.



You are now back in the Network dialog. Click on the *Add* button again, but this time choose *Protocol* and *Add* from the following dialog box.



Now select your TCP/IP stack software, e.g. Microsoft TCP/IP. Confirm your choice by double-clicking on TCP/IP.



The Network dialog will be redisplayed with TCP/IP added to the list of installed network components.



You will have to configure your TCP/IP software before you can actually start setting up IP connections.

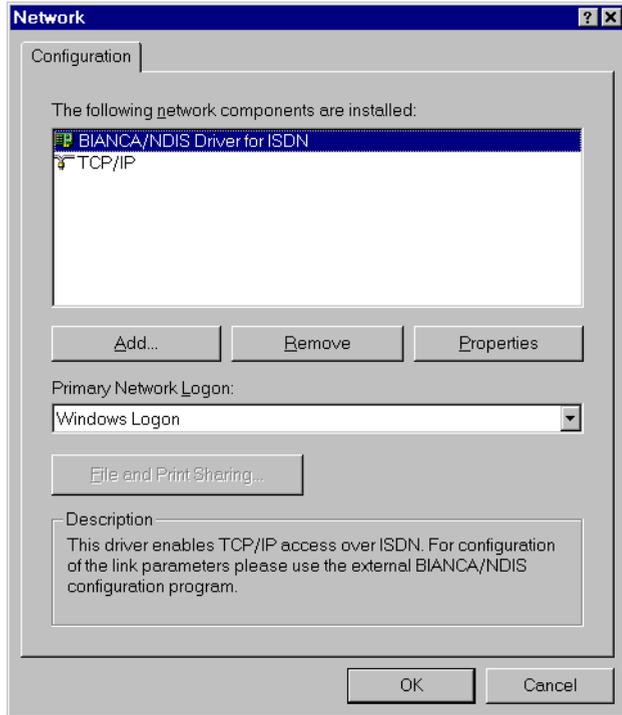
You can then leave the Network configuration and reboot your PC to activate the new configuration.

Preparing the Deinstallation when using BIANCA/NDIS

If you are using BIANCA/NDIS with a TCP/IP stack software you have to undo the configuration entries made for their cooperation before uninstalling the BIANCA ISDN software (see [page 23](#)).

As an example the appropriate steps for Windows 95 are explained here.

First start the *Control Panel* from the *My Computer* window. From there start the *Network* configuration. Select the “BIANCA/NDIS Driver for ISDN” entry and *Remove* it.



Leave the Network configuration. You can then proceed un-installing the software as explained from [page 23](#).

