

# ISDN PBX System

Short User Guide

AC 16 WebPhonie



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# Short User Guide

## Table of contents

Get Started .....	4
Enter MSN numbers quickly .....	4
Important notes on using analogue equipment .....	5
Pictograms and Buttons .....	6
LED´s of the AC 16 WebPhonie .....	6
Check Contents of delivery .....	7
Connections of AC 16 WebPhonie .....	7
Safety Notice .....	8
Select Location .....	8
Mains Socket .....	8
Sockets of the AC 16 WebPhonie .....	9
Connect Analogue Extensions .....	9
Notes to the ISDN connection (S0) .....	9
Looped through external S0 .....	10
Connecting extensions to separate TAE sockets .....	10
Wallmounting .....	10
Software Overview .....	11
System Requirements .....	11
TK-Suite Server .....	11
TK-Suite Bill .....	12
TK-Suite Contact .....	12
TK-Suite Client .....	12
TK-Suite Set .....	12
Install TK-Suite .....	13
WAN Miniport .....	15
Establish a USB Connection .....	15
CTI – Computer Supported Telephony via TAPI-Connection .....	15
Driver Installation .....	16
Configure a Connection .....	17
Connecting to the Internet or another Network .....	17
Deinstallation of Drivers .....	17
Disconnect the line .....	18
Connecting to the Internet or other Network .....	18

# Short User Guide

## Get Started

Connect the plug at the end of the power supply into the socket labelled "Power" until you hear it click.

Connect one end of the ISDN connection cable into the socket labelled SO until you hear it click in place.

Connect the other end of the cable to the NTPP of the network provider or the installed socket.

Connect the plugs of your telephone equipment to the telephone system.

The default setting of the AC16 WebPhone is that the first connection is extension 11 and the second connection is extension 12.

Plug the power supply into the 230V main socket. The green LED will light up.

Enter the MSN numbers (see below).

You now can make calls. After lifting the telephone receiver you will hear the dial tone of the telephone exchange.





An incoming call received on one of your MSN numbers will ring extension 11 and 12.

## Enter MSN numbers quickly

MSN numbers on which you can be called can be programmed quickly and easily. With this function you can enter the MSN and at the same time allocate each MSN to the connected telephone apparatus.








Example: For the first socket (Phone) you enter the telephone number (345678). For the second socket (Fax) you enter the phone number (345677). Therefore, callers ringing 345678 will call your phone and callers ringing 345677 will call your fax machine.

For further information see "Programming Instruction".

Start programming mode:      (if required enter PIN, not activated in default)  

**PRO**

	    		 		
lift receiver	<b>MSN</b> quick programming	<b>MSN-</b> Index	Enter Multi Subscriber Number (MSN)	acknowledge tone	replace receiver

Stop programming mode:       

**END**

# Short User Guide

## Important notes on using analogue equipment

Only analogue Apparatus which are approved to be connected to the Public Switched Telephone Network (PSTN) may be connected to the analogue side of the system. This includes all 2 wire telephones, answering -, fax machines, and modems.

The system supports both dialling method Loop Disconnect (LD) or Dual Tone Multi Frequency (DTMF). DTMF is a faster dialling method. The system will dedect the dialling method automatically.

From an analogue phone, you can call any extension free of charge by dialling the internal phone number. You can call an external number after seizing an outside line.(B channel) Do do this dial 9 (0) to get an outside line and then dial the telephone number required.

If you set "spontaneous exchange line seizure with internal " for your telephone extension then you must press the hash button before the internal phone number. Note in this mode you cannot call an extension if your phone is an older LD or rotary type dial phone.

To carry out system functions, your phone must have a STAR Button (\*). The sequence to enter will be \* followed by the function number. If your phone is an older type LD phone then you can dial 99 instead of \* .

To make an enquiry call you phone must have an R Button (Recall Button). The signalling for this must be set to Timed Break Recall (TBR). On older rotary dial phones you do not need to press the R Button when making an enquiry call. System functions such as last number redial, abbreviated dialling etc, can be carried out from any LD phone. Details of such operations are given in this manual and in the short reference guide under Analogue and ISDN Terminals.

You can also use the functions of a standard analogue telephone (e.g. redial, abbreviated dialling) in conjunction with your telephone system. Please refer to the operating instructions for the telephone concerned for details of these functions.

Details of how to operate the functions of your telephone system that you are able to use from a standard analog telephone set to DTMF are given in this instruction manual and in the „short-form operating instructions for analogue and ISDN terminals“.

Each programming entry will be acknowledged by a confirmation tone. If this tone is not received or if an error tone is returned then you must repeat this entry.

The telephone system is forwarding counting pulses to analogue terminals to display connection charges (charge pulses).









For data transfer via the analogue ports, the telephone system supports the V.90 standard (up to 56600 bps, a reduction in speed is possible due to transmission path and cables used, down to 33600 bps V.34+).When operating a modem, it is imperative to configure the modem to blind dialling because most modems do not detect the dial tone of a telephone system.On modems that operate with the Hayes command set, blind dialling is set by means of the X0..X4 parameters

# Short User Guide





## Pictograms and Buttons

All operations and functions of the telephone system is explained in clear and easy to follow pictograms.

### Pictograms

	Ringer (tone ringing)		Conduct a call
	Pick up receiver		Replace receiver
	Dial Phone or Code Number		Conference
	Acknowledgement tone		Room monitor

### Buttons

	Recall Button		Star Button for functions
	Number Button for entering digits, e.g. „9“		Hash Button to dial extension when automatic line seizure is active

## LED´s of the AC 16 WebPhonie

### Green LED

- constantly green, while the AC 16 WebPhonie is in operation.
- flashes slowly, if a diversion to an external number via the exchange is switched on
- flashes fast, if a new number is listed in the call log (Call log has priority to diversion to)

### Red LED

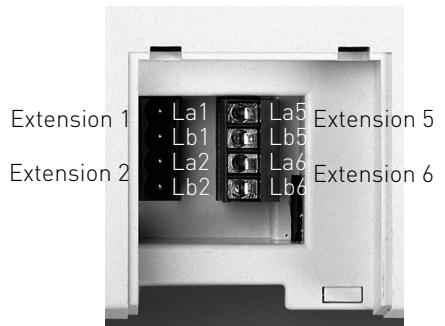
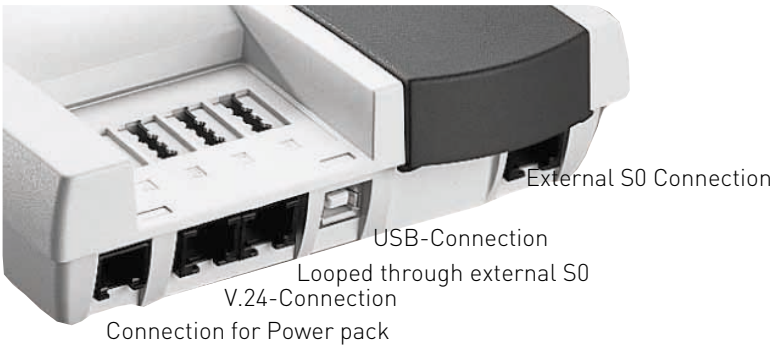
- flashes slowly, if one of the B Channels is busy
- constantly red, if both of the B Channels are busy

# Short User Guide

## Check Contents of delivery

- 1 ISDN-PBX System
- 2 plugs and screws
- 1 ISDN-connection cable, lenght 1,5 m
- 1 PC-USB connection cable, lenght 3 m
- 1 PC-V.24 connection cable
- 1 230 V-Power Pack
- 2 short manuals
- 1 CD-ROM with TK-Suite

## Conections of AC 16 WebPhonie



# Short User Guide

## Select Location

Install the System in a dry room free of any hazardous materials. Avoid sites near Air Conditioners, Radiators, Equipment with excessive high radiation, direct sunlight, excessive dust and the danger of liquid spillages such as Water or Chemicals.

Ambient Temperature 5C to 30 C. Max humidity 70% non condensing.

The distance of the equipment to other objects such be considered to guarantee an air circulation. The minimum clearance distance of 50 cm should be adhered to. The distance of the system to the mains socket and the telephone network socket should not be more than 1 meter. (Length of mains cable 1.20 m)

It must be made possible to place a Laptop or PC near the telephone system for programming.

## Mains Socket

On power failure the PBX System is without function.  
Use the provided Power Pack only. Modell No.: 533 238A

## Safety Notice

The telephone system is for the connection to an ISDN Basic Rate line. (DSS1, Point to Multi Point)

You may connect any analogue apparatus to the system which your are allowed to connect to the Public Switched Telephone Network (PSTN).

You may also connect to an internal SO Bus any DSS1 ISDN devices which are approved to be connected to the Public Switched ISDN Exchange. In addition up to two AGFEO Digital Systemphones can be connected to an internal SO Bus.

Any other use of the system which does not comply with the aforesaid is prohibited.

The system has a General European Connection Licence.

- The system conforms to the specified conformity and safety regulations.
- Warning! The telephone system must have a functional electrical earth.
- DANGER! Please disconnect the apparatus from the mains socket before connecting extensions and lines to it. Before you commence installation, please touch the printer connection which is underneath the system to discharge any static electricity. This will protect any static sensitive components within the equipment.
- Do not connect or disconnect any lines during a thunderstorm.
- Install all cables so that no one walks or trips over them.
- Ensure that no liquids can enter the system as otherwise short circuits maybe the result.
- No liability will be accepted for consequential loss or damages such as call charges for unintentional calls or connections.
- No calls can be made during a power failure. We would suggest to install surge protectors to all lines or extensions which do not originate within the main building.

Connection cables for MoH, USB and RS232 must not exceed 3 metres.



# Short User Guide

## Connect Analogue Extensions

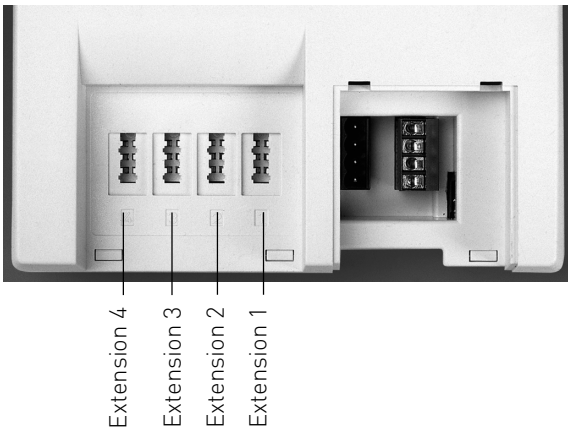
You may connect up to three analogue apparatus to the system which have been approved for connection to the public switched telephone network.

a/b-Apparatus is:

- Telephone (2 wire Phone or POT) either LD or MF Dialling with Timed Break Recall (TBR) (60 – 800 ms)
- LD Phones may only have limited feature access.
- Fax machines Group 3
- Telephone Answering Machines
- Modem 56k (V.90 to 56600 bps, may reduce to 33600 bps due to quality of lines V.34+)

Connect the analogue apparatus via 2 wires to the a and b wire (Speech Pair) of the system port

## Sockets of the AC 16 WebPhonie



## Notes to the ISDN connection (S0)

The system has been designed for the connection of an ISDN standard access. (Point to Multi Point) On this type of connection you may operate further ISDN apparatus. For example your PC with ISDN Card or a ISDN phone and more. The Point to Multi Point connection could be installed as an ISDN Bus which is connected to the NTTP. Up to 12 sockets may belong to this Bus. In addition to your telephone system you can connect up to seven additional ISDN devices to this ISDN Bus.

# Short User Guide

## Looped through external S0

You can connect other ISDN devices in parallel to your telephone system on the looped through S0 Bus. This connection is not an internal S0 of the system but a connection to the NTPP of your Network Operator.

## Wallmounting

- Mark two vertical drill holes 125 mm apart on the wall.
- When marking the drill holes, make sure that there are no concealed lines at these points (gas, water pipes, electric cables or similar).
- Drill the two holes.
- Hammer in the plugs flush with the wall.
- Screw in the two screws leaving the head protruding by about 4 mm.
- Hang the telecommunications system on the screws and pull it down on the wall until it snaps into place.

## Connecting extensions to separate sockets

If you want to connect your extensions to separate sockets, you will find the connection panel for the plug-in extensions on the downside of your AC 16 WebPhonie. Unplug the power pack from the 230 V mains socket before working on the connection panel. Replace the cover before plugging the power pack back into the mains socket. The assignment of the extension connections is displayed on the connection panel. To ensure perfect functioning of the telecommunications system and the connected extensions, you should connect the terminals either to the sockets or the plug-in terminals! This means that if a extension is connected directly via a socket, e.g. connection 1, no second device should be connected via the terminals at the same extension connection, e.g. La1/Lb1. The connections La and Lb of the plug-in extensions are connected with connections 1 and 2 of the separate sockets. You can use commercially available telephone lines for the connection. We recommend: telephone lines

Length between telecommunications system and sockets: max. 800 metres at 0.6 mm wire diameter.

# Short User Guide

## Software Overview

The enclosed CD-ROM contains the following software: TK-Suite Basic or TK-Suite Configuration Tool and the TAPI and USB drivers. There is also the NDISWAN Driver for the AC 16 WebPhone. To be friendly to our environment we have not included printed version of the individual programs as help will be available in each program by just clicking on the question mark.

## System Requirements

Following system features are required for the installation of the enclosed software

- IBM or compatible PC with hard disc and CD-ROM drive
- Pentium II with a processor speed of 233 MHz or higher
- 64 MB of available hard disc space
- Microsoft Windows 2000/ME/XP

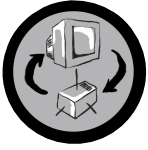
Should you like to run TK-Suite with several clients then we would like to suggest to use Windows 2000 or XP as platform of your server installation.

## TK-Suite Server

**TK-Suite Server** contains the following components, TK-Suite Set, TK-Suite Bill and TK-Suite contact. TK-Server is a program which runs in the background under Windows ME and as a service under Windows 2000/XP. This means that you do not work directly with the program but with the TK-Suite-Client and an Internet Browser application.

# Short User Guide

## TK-Suite Set



You can program the telephone system from your PC with TK-Suite Set. Call forwarding, ringing rhythms, day/night service and all ISDN parameters can be set quick and easy. With TK-Suite set you can save the telephone system configuration on your hard disc. If required you can send this back up data back to the telephone system. (see Chapter "Programming of the Telephone System")

With the LCR component of TK-Suite Set you will be able to reduce call cost of your telephone system, provided your LCR table is kept up do date, by using the most cost effective service provider. Should this line be busy, then the automatic fallback function of the system will automatically select the next alternative service provider. A individual routing table can be created at any time to ensure cost effective phone calls. Should you like to take advantage to use a provider on a "call by call" \* selection, without being registered to this or having an account, then this is also no problem. Up to eight providers with their dialling codes can be selected in a weekend profile. In addition you can select up to eight tariff tables.

\*Network dependent

## TK-Suite Bill



TK-Suite Bill is for the analysis of your call data. If your service provider should forward call charge information, then the software will record all call charges. TK-Bill will sort and calculate per extension, date, telephone number or customer. In addition a sort of all calls per providers is also available. TK-Bill will not only record calls cause a charge, but also records incoming calls.

## TK-Suite Contact



TK-Suite Contact is your personal telephone and address book with multi user functionality. It is possible to import the phone book data of the telephone system into TK-Suite Contact. It works closely together with TK-Suite Client to give you a fully functional CTI working environment.

## TK-Suite Client

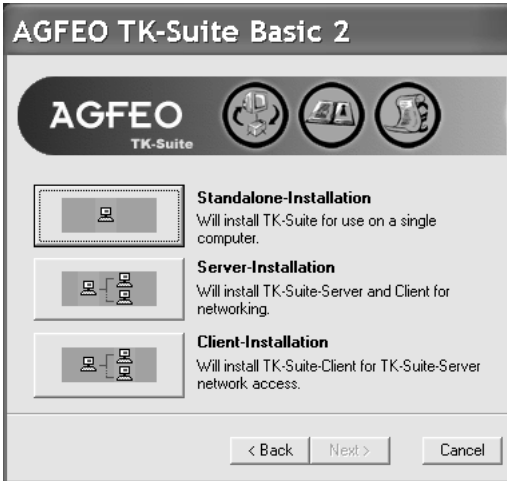


TK-Suite Client serves to integrate all TK-Suite components in your desktop so that it is possible to access each tool per mouse click. In addition TK-Suite Client offers you a fully functional CTI workplace with the ability to call telephone numbers from TK-Suite Contact, display incoming calls and reminders with the resubmission function.

# Short User Guide

## Install TK-Suite

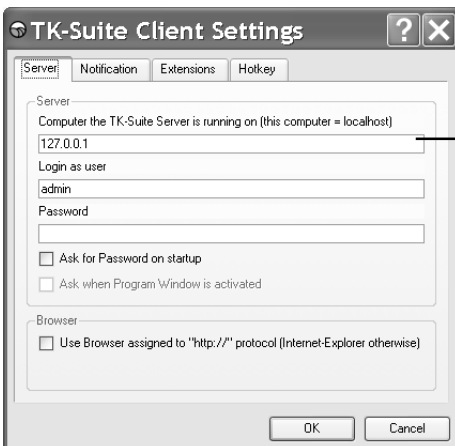
Start the installation routine of TK-Suite. After you selected the installation folder and start up group, you will be asked from the TK-Suite Basic installation routine if the application should be installed as Single Work Station, Server – or Client version.



Select **Single User** if you would like to use the Telephone System with one PC only.

Select **Server** if you would like to use the Telephone System with more than on e PC.

Select **Client** if you would like to use the Telephone System with more than one PC and have already installed the Server Version to which you have access. Please ensure that the User Setting has already been prepared on the Server for the Client.

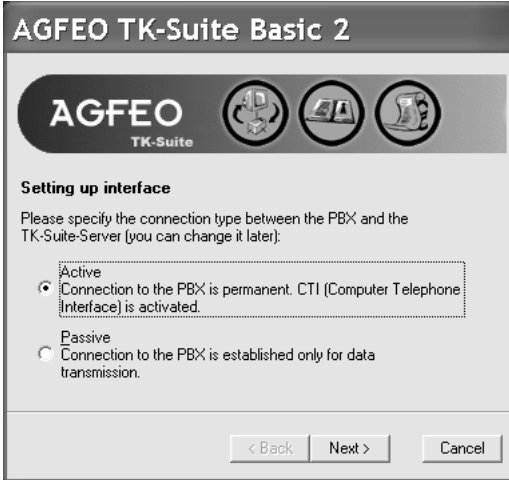


You will be asked for the Server Name, User Name and Password if you install TK-Suite Client to access TK-Suite Server on the network. Name and Password should have been allocated before in the TK-Suite Server version.

# Short User Guide

## Install TK-Suite

You select between an active an passive connection on installing TK-Suite Basic.



### ACTIVE:

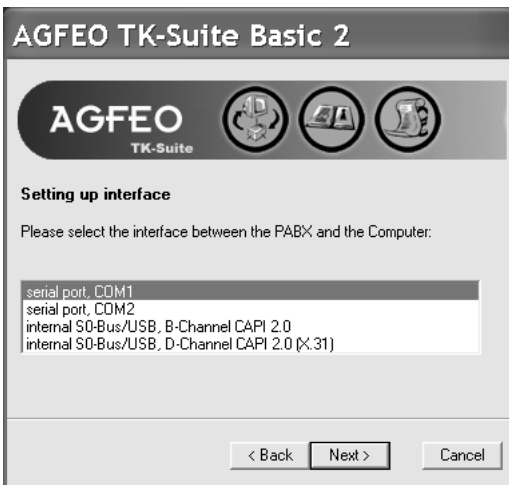
The connection to the Telephone System is permanent and the port to which the computer is connected is constantly in use and not available for any other application. A sensible choice for a Server or Single User if the CTI application should be used constantly.

### PASSIVE:

The connection to the telephone system will only be established on programming or transfer of call charge data. The port may be used by other applications when not in use.

CTI is **not** possible with this setting.

Afterwards you may select the type of connection to the system:



- Com1 or Com 2 if you want to communicate via the serial port with the system.

- Internal SO/USB Capi 2.0 if you want to communicate via the USB or ISDN connection. This type of connection does not support CTI and will not be offered if you have selected "Active" before hand.

- X31 if you want to communicate with the system via the internal SO or USB connection and not to engage a speech channel of the internal SO of the system.

To use CTI you must communicate with the system either via the serial port or via the X31 protocol.

# Short User Guide

## WAN Miniport

**WAN Miniport** is a driver for Windows ME/2000/XP, in which you can use the dial up network via ISDN. In addition you are able to connect to the Internet and (via the Remote Access Service) connect computers with each other. Further information regarding the Dial Up Network can be found in the Windows documentation.

## CTI – Computer Supported Telephony via TAPI-Connection

TAPI- (Telephony Applications Programming Interface) is unlike TK-Phone not a standalone CTI application but a connection between a TAPI capable Windows application and the telephone system. It is possible to control the telephone system with computer programs supporting this application. The extend of this control depends on the application used. In general it will include the set up of an outgoing call (Dial from the application) and the display of incoming calls.

TAPI is an interface of the Microsoft Operating Systems and the application of the Microsoft-Telephony-Interfaces. To connect the telephone system to this interface a Telephony Service Provider (TSP) from the ISDN hardware manufacturer, in this case AGFEO, is needed. The TSP is a driver which has to be installed on your PC. It will perform the requested TAPI functions and regulate the necessary data exchange between PC and the telephone system. The TSP has to be constantly enhanced due to the ever increasing functions of TAPI supported applications.

In order that you have the latest TSP to hand for your application we have made this available for download at our website at <http://www.agfeo.de>. This self extracting file contains information on installation and supported applications. Should you have no internet access, then please contact your dealer or the info fax on 0521 44709 98555.

## Establish a USB Connection

You may connect the telephone system with a PC or Notebook via the USB connection. (Not supported with Windows NT 4.0)

1. Take the supplied USB Cable. You will identify this on the USB Symbol on the plug.
2. Plug in the square plug of the USB cable into the USB socket of the telephone system
3. Plug in the flat plug of the USB cable in one of the USB connections of your computer
4. Switch on your computer

On start-up of Windows with the telephone system, you will be requested to enter the location of the driver. More to this is in the chapter "Installation of Drivers"

# Short User Guide

## Driver Installation

**IMPORTANT!** Should you have already an ISDN card installed in your computer, then this and the associated driver must be first deinstalled. Please follow the instruction of the individual manufacturer for this. It may be that during the installation you will be asked to insert the CD of the operating system. Therefore it will be advisable to have this CD to hand. Before you can install the driver you must connect the telephone system to your computer via the USB connection.

1. Once the PC has identified the connected telephone system, the hardware assistant will be displayed. The hardware assistant will install the software for the new Hardware components (AC 16 WebPhonie). Click on "next"
2. In the following dialog window select find "suitable driver" for hardware (recommended).
3. Enable the option "CD-ROM Drive" and de-select all other check boxes. Insert the CD "Communications Software" with the USB Drivers in the CD-ROM drive and click on "next".
4. After the driver has been found click on next to start the installation.
5. Drivers being installed
6. Under ISDN Configuration please read the notification and click on "next".
7. Select the D Channel Protocol: "DSS1: Euro-ISDN" and click on "next".
8. Now you will be asked to enter the telephone number(s). Enter the extension number(s) of the PC connected to the USB port. All internal extension numbers will be available. (see also programming of system, port allocation) Click on "next".
9. The ISDN-configuration is completed. Click on "Finish"
10. Insert the Operating System CD if asked to do so, to install the USB support. After the software has been installed click on "finish".
11. Restart your computer to complete the installation.

### **If you want to change the extension number of the PC on the USB port afterwards:**

Select "Start → Programs → Accessories → Communication → Assistant for the ISDN Configuration.

1. Under ISDN configuration read the notification and click on next.
2. Select the D Channel Protocol : DSS1 : Euro-ISDN and click on next
3. You will now be asked to enter the extension number(s). Enter the extension number of the PC on the USB port. Extension numbers from 20 to 29 may be selected. (see also system programming port allocation) click on next
- 4 The ISDN Configuration is completed, click on finish
- 5 To complete the installation, please restart your PC.



# Short User Guide

## Deinstallation of Drivers

Should you now longer require the drivers, then you may deinstall these.  
Remove the AC 16 WebPhonie in Control Panel. (Start/Control Panel/Add-Remove Programs)

## Connecting to the Internet or another Network

Here you will find notes how to connect with the Microsoft Dial Up Network to the Internet or other Networks.

1. Open (Double Click) on the symbol "My Computer" on your desktop.
2. Open (Double Click) on the symbol "Dial Up Networking"  
The Dial Up Network is automatically installed with Windows 98 standard installation. Should the Dial Up Network not be available within "My Computer" then you may add this component by selecting "Start → Settings → Software" . You will find information within Windows Help, Topic "Software"
3. If this is for your first connection, click next, otherwise double-click on "make new connection"
4. Enter in the assistant the name of this connection, i.e. your provider.
5. In "Select a device:" select "AGFWMP-Line 1" and click on next
6. Enter in the field "Telephone Number" the ISDN number to connect to your Internet Provider or remote Network and click on next.
7. Click on finish. An Icon will appear for this connection.

## Configure a Connection

- 1 If the "Dial Up Network" is not opened: Double click on "My Computer" as displayed on your desktop. Open the "Dial up Network".
- 2 Open the dialog window in which you can configure the connection. Right click on the symbol of the earlier added connection and select "Properties".
- 3 Select the tab "Server Types". Complete the following steps:
  - if you set up a connection to the internet, deactivate "Log on to network"
  - activate "enable software compression"
  - for Internet connections activate the "Allowed network protocols" to "TCP/IP".

# Short User Guide

## Connecting to the Internet or other Network

After you have established the setting for your Internet provider or other network as described, you now can dial into it. If you want to surf the net or call off e-mail messages, then you must have installed a Web-Browser or an e-mail application.

Follow the following steps to establish a connection:

- 1 Open (double click) on "My Computer" on your displayed on your desktop
- 2 Open (double click) the icon "Dial-Up Networking"
- 3 Open (double click) the earlier new set up connection
- 4 In the dialog window "Connect To" do the following:  
Enter the "User Name" and "Password" as supplied to you by your Internet provider and click on connect. As soon as the connection is established a dialog window will open with the message "Connection Established"
- 5 You now can surf the Internet with the Web-Browser or call off your e-mails with an e-mail application.

## Disconnect the line

To disconnect an established connection, click on "Disconnect" in the dialog window of "Connection Established", or double click the dial-up icon in the status area of the taskbar.



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