



DU-128TA+
USB ISDN TA

User's Guide

Rev. 01 (Jun. 2001)

Printed In China



RECYCLABLE

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Preface

This “User manual for the installation of USB ISDN TA” is designed to assist users in using the USB-based ISDN TA. Information in this document has been carefully checked for accuracy; however, no guarantee is given as to the correctness of the contents. The information contained in this document is subject to change without notice. Should you have further inquiries, please visit D-Link Web.

Safety instructions

1. You shall get the installation guide as you use the ISDN TA. Please read the installation guide thoroughly before you set up the ISDN TA.
2. The ISDN TA can be used with a BRI (basic rate interface) ISDN line.
3. The ISDN TA is a complicated electronic unit that may be repaired only by authorized and qualified personnel. Please do not try to open or repair the ISDN TA yourself.
4. Do not place the ISDN TA in a damp and humid place such as a bathroom.
5. The ISDN TA shall be used in a sheltered and non-slip place within a temperature range of +5 to +40 Celsius degree.
6. Keep the wrap bag of ISDN TA and the clip binding the cable out of reach of children. Because small children and babies will be in danger of choking if they put small objects in their mouth.
7. Please do not expose the ISDN TA to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.
8. Once you would like to dispose of the ISDN TA, please follow the local regulations on conservation of the environment.

Features and benefits of USB ISDN TA

- Easy installation through Plug&Play
- Full 128Kbps-bandwidth optimization over a single ISDN line to the corporate Intranet and Internet for web surfing, video conferencing and file transferring
- Compatible with major service providers which adopts the major ISDN protocols such as PPP, V.120,V.110, X.75,& MLPPP
- Supports Data/Fax/Voice via communication software
- Powered from the USB port without the need of using power supply

Application of USB ISDN TA

- Web surfing
- E-mail
- Fax
- File Transfer

Minimum system requirements

For Windows

- USB ports on the computer
- Personal computer with a Pentium/90 MHz or higher processor running Microsoft Windows 98, or Windows Me or Windows 2000 or Windows XP operating system
- 6 MB of RAM
- CD-ROM Drive

For Mac

- Mac OS 8.6, or 9.X, or Mac OS X
- Mac G3, Mac G4, PowerBook with USB ports, iMac, iBook
- CD-ROM Drive

Installation

Windows Users

Installing USB

Windows 98/Me

The purpose of installed drivers are as follows:

- USB device driver is for USB ISDN TA be run at Windows 98 /Me.
- CAPI 2.0 driver is for the interface of communications application.
- The NDISWAN driver is for letting USB ISDN TA set up the Internet access.
- Besides Internet accessing, the Virtual Com Port driver will let you use communications software such as fax application with USB ISDN TA to receive/send fax via ISDN line.

(1) Plug USB ISDN TA to your computer via USB.



The plug and play function of the operating system will first interrogate the USB ISDN TA to determine if its driver has been installed. If not, Windows will prompt you for the driver.

(2) Insert the driver CD into your computer CD-ROM drive.





Please select the driver path “Win98_Me” on the driver CD, it will auto detect the model and prepare drivers.



As you see the default dialogue of “D-Link USB ISDN TA for Win98/Me(COM3/4)”, please click “Next”.

Installing NDISWAN & Virtual Com Port Drivers

Windows 98/Me

If you want to install as COM5/6, please select “One of the other drivers” and click “View List” to select “D-Link USB ISDN TA for Win98/Me(COM5/6)”.

(3) ISDN Configuration

After installing USB driver, it will install NDISWAN driver automatically. You will find the ISDN Configuration screen as following dialogue:



Press Next->Next



Enter Phone Number->Next->Finish





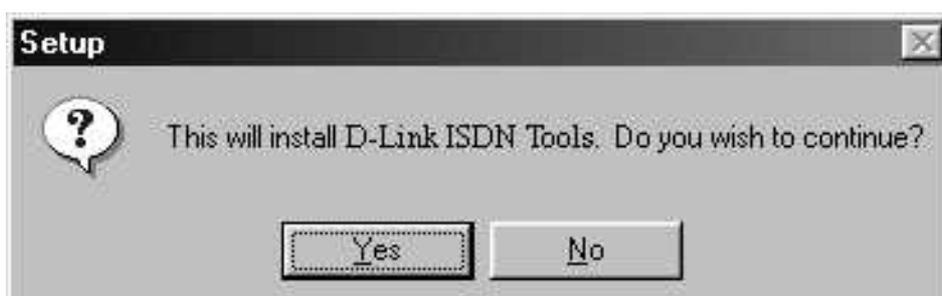
(4) After installing the driver, the computer will ask for restarting.

(5) Installing D-Link ISDN Tools

ISDN Tools will provide you with following items:

ISDN Tester	Check the device and the ISP phone number are available or not
Kiosk	Observe the online traffic information of ISDN, setting of PPP, MSN, Switch type, and log.
PnP Indicator	Quickly know the current driver version, connection speed and add/drop the speed whenever you want.
Uninstall DU-128TA+	Easily uninstall the drivers if needed.

The computer will ask whether you want to install “D-Link ISDN Tools”. Press “Yes” if you want it.



Windows 2000

The purpose of installed drivers are as follows:

- USB device driver is for USB ISDN TA be run at Windows 2000.
- CAPI 2.0 driver is for the interface of communications application.
- The NDISWAN driver is for letting USB ISDN TA set up the Internet access.
- Besides Internet accessing, the Virtual Modem driver will let you use communications software for file transfer.

(1) Plug USB ISDN TA to your computer via USB.





The plug and play function of the operating system will first interrogate the USB ISDN TA to determine if its driver has been installed. If not, Windows will prompt you for the driver.

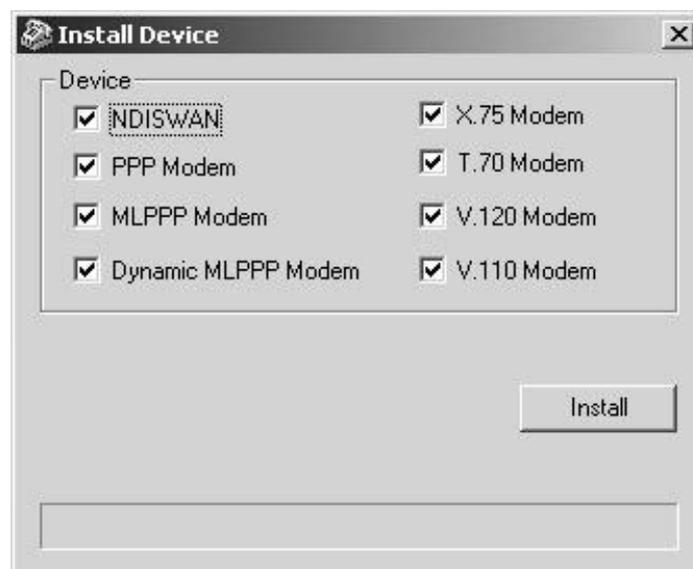
(2) Insert the driver CD into your computer CD-ROM drive.





Please select the driver path “Windows 2000” driver from the driver CD.

(3)Installing NDISWAN & Virtual Modem drivers



(6) Installing D-Link ISDN Tools

ISDN Tools will provide you with following items:

ISDN Tester	Check the device and the ISP phone number are available or not.
Kiosk	Observe the online traffic information of ISDN, setting of PPP, MSN, Switch type, and log.
PnP Indicator	Quickly know the current driver version, connection speed and add/drop the speed whenever you want.
Uninstall DU-128TA+	Easily uninstall the drivers if needed.

The computer will ask whether you want to install “D-Link ISDN Tools”. Press “Yes” if you want it.



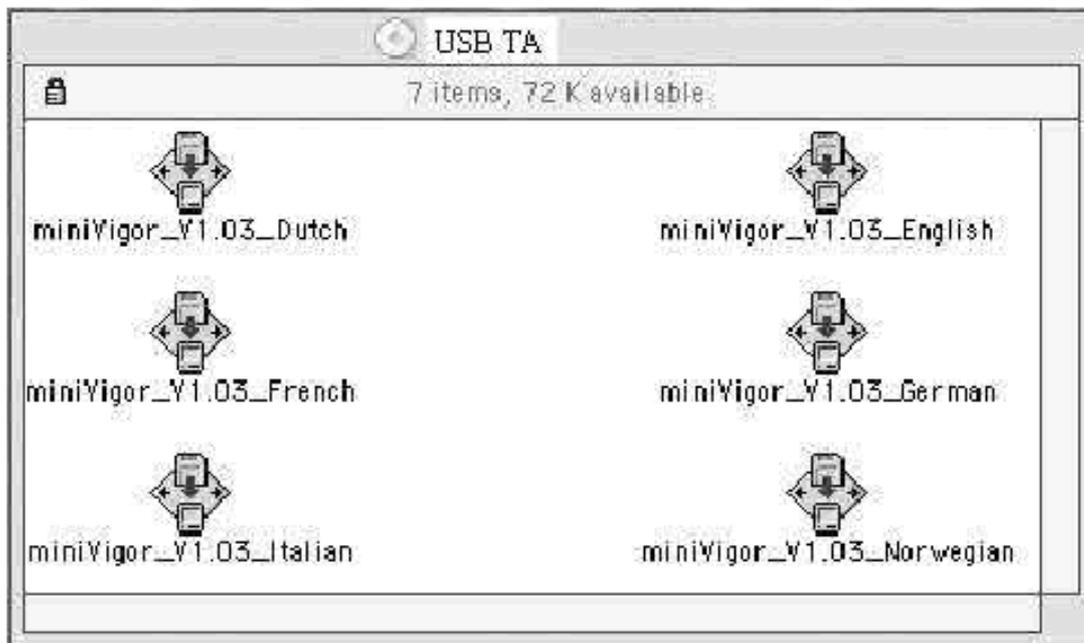
For Mac Users

Installing drivers on Mac OS 8. x or 9.x

Before installing the USB ISDN TA, please check whether your Mac system need the upgrade or not.. You can refer to HTML document from the USB ISDN TA driver CD. Kindly remember to timely get the latest update information for your Mac from visiting www.apple.com

Procedure of Installing drivers

(1) Select the matched language of driver and click it for installation.



For example, if you are using French version of OS, you need to use French version of USB ISDN TA Mac driver. If you can not find the language the same as your Mac OS, you can select English version.

(2)After the successful installation, you shall have the drivers and USB ISDN Tools for accessing Internet.

Control Panel	
miniUSB TA Kiosk	Deinstallation
Information Kiosk is the setting program for USB ISDN TA. It also provides comprehensive on-line information for each call.	Easily assists you to uninstall the device driver if necessary.

(3) Plug the USB ISDN TA to your Mac via USB. After that, the USB lamp of the USB ISDN TA should light. It means your USB ISDN TA is working now.

Installing drivers on Mac OS X

Procedure of Installing drivers

Please firstly follow up the step 3rd to uninstall the old driver if you have installed the previous beta/old driver on Mac OS X.

(1)Run pkg-file

(2)Restart Mac after installing

(3)If you want to uninstall your previously- installed driver, please use “Terminal” and enter “super user”, then run the “uninstall” script. “uninstall” script is provided within the driver CD. You can copy it into home directory or others. Or, you can just remove xUSBTADrv.kext under System/Library/Extensions.

Functions of USB ISDN TA

For Windows Users

1. Plug&Play

The Plug and Play of Windows 98/ME/ 2000 and USB allows you to unplug the device and then plug it again even though the computer is off or on. Remember to terminate the ISDN call before unplugging the USB ISDN TA in order to assure the Telecom not to keep charging.

2. 64Kbps/128Kbps Connection

When you subscribe ISDN from Telecom, you may use the USB ISDN TA for stable & cost-effective accessing Internet. The USB ISDN TA enables you to use full 64Kbps or 128Kbps for Internet connection and remote LAN access via ISDN. Moreover, you can use the communications software such as fax sending/receiving together with USB ISDN TA via ISDN network.

2-1. Call Bumping

The USB ISDN TA supports the call bumping function. Users do not need to set anything to enable this function which will run automatically. If there is an incoming analog call and the line connection is at 128Kbps, the USB ISDN TA will drop to 64Kbps (one B channel) to accept this analog call. Also if you want to make a remote analog call and the line connection is at 128Kbps,

2-1.1 Call Bumping/Connection 128Kbps

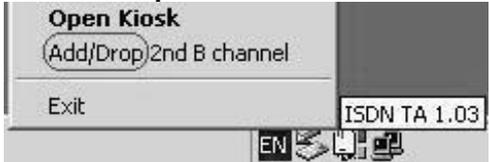
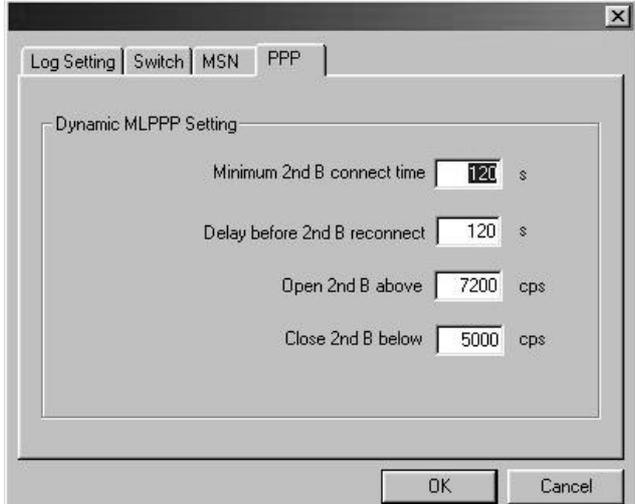
The USB ISDN TA will drop to 64Kbps (one B channel) to make this call out.

Once 128Kbps is dropped to 64Kbps (i.e. one B channel is dropped), you may manually set up the connection back to 128Kbps by yourself.

2-2. Connection at 128Kbps (Two B channels)

You may use both B-channels to set up a connection speed of 128Kbps if your ISP or the remote server supports 128Kbps (Multilink PPP).

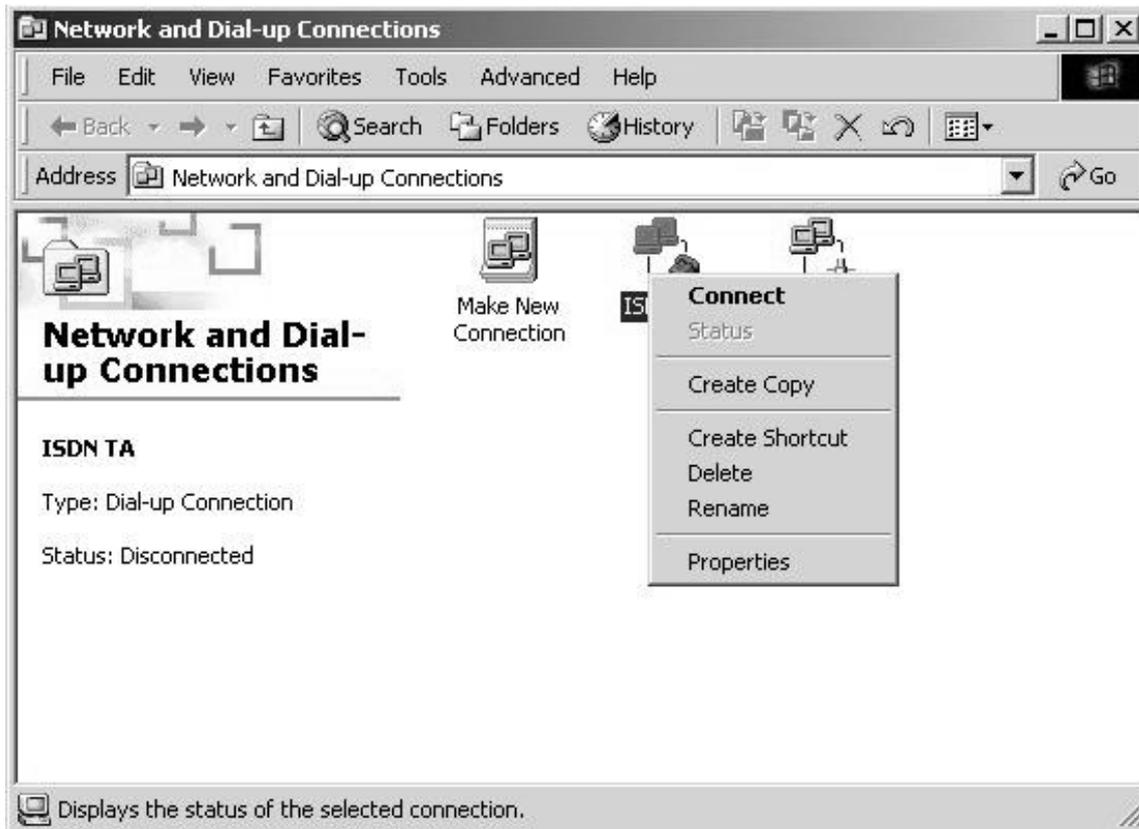
A. Connect 128Kbps using VCOMM for Windows 98/Me/2000)

Modem Type	Function	Remark
D-Link ISDN PPP	Connect at 64Kbps first	Right-click on the PnP indicator to add to 128Kbps or drop back to 64Kbps. 
D-Link ISDN MLPPP	Connect at 128Kbps first	Right-click on the PnP indicator to drop to 64Kbps or add back to 128Kbps. 
D-Link ISDN Dynamic MLPPP	Connection at 64Kbps first	The speed will automatically adjusted via the traffic setting on the Kiosk. 

B. Connect 128Kbps using NDISWAN

If you select NDISWAN (D-Link NDISWAN-Line0X) as your device then can bind the other device for multilink (128Kbps). To establish a 128Kbps (multi-link PPP) connection, please proceed as follows:

Right-click on the “ISDN TA” icon and select the “Properties”.



For Windows 2000

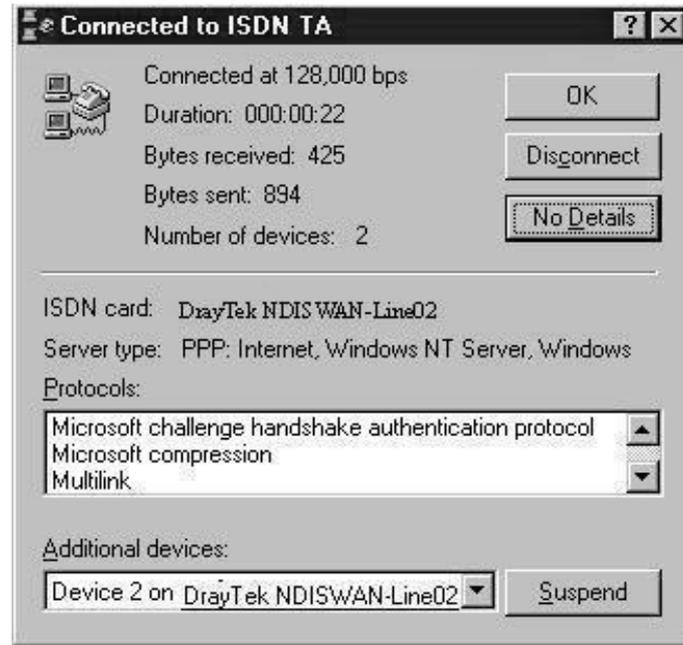
On “General” dialogue:

Check both “ ISDN channel-D-Link NDISWAN” .



Then, you will be able to make connection at 128Kbps!

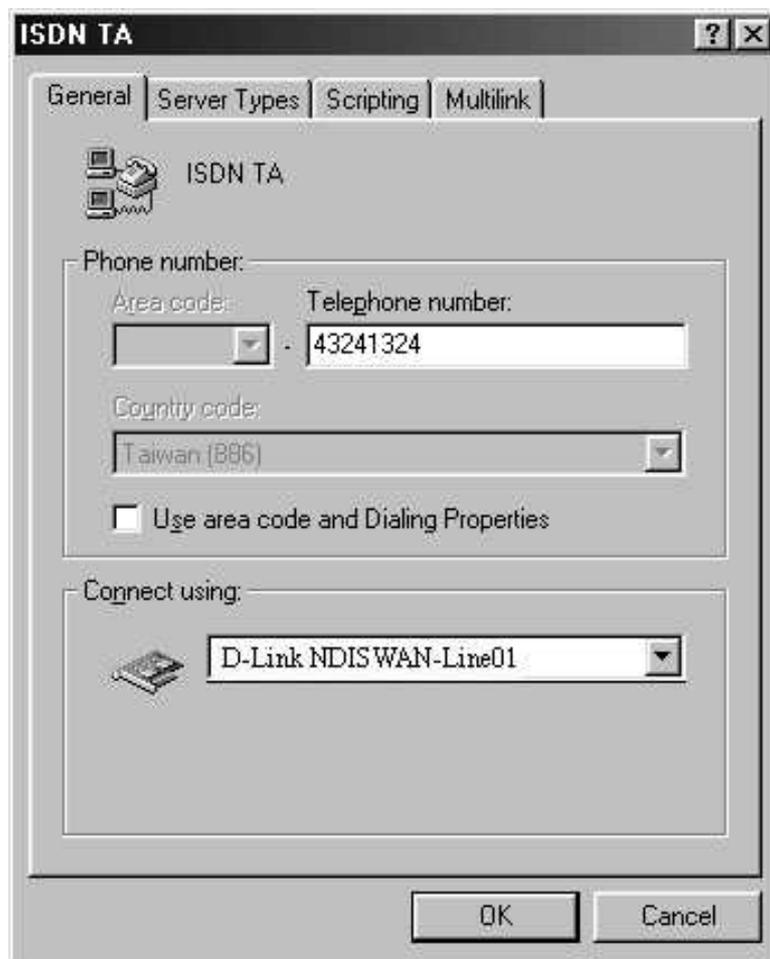
If you want to suspend/resume ISDN 128Kbps connection via NDISWAN driver, please right click dialup icon on system tray.



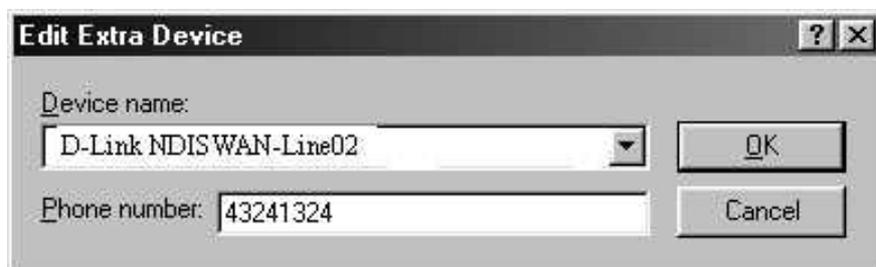
Select "Status" and enable "Detail display", you can suspend to 64K or resume to 128K connection anytime you want.

For Windows 95/98/Me

Select “D-Link NDISWAN-Line01”



In “Device Name” of “Multilink”, select the unused NDISWAN device, e.g. “D-Link NDISWAN- Line 02”. In the field “Phone Number” enter the same number as already used for the connection setup.



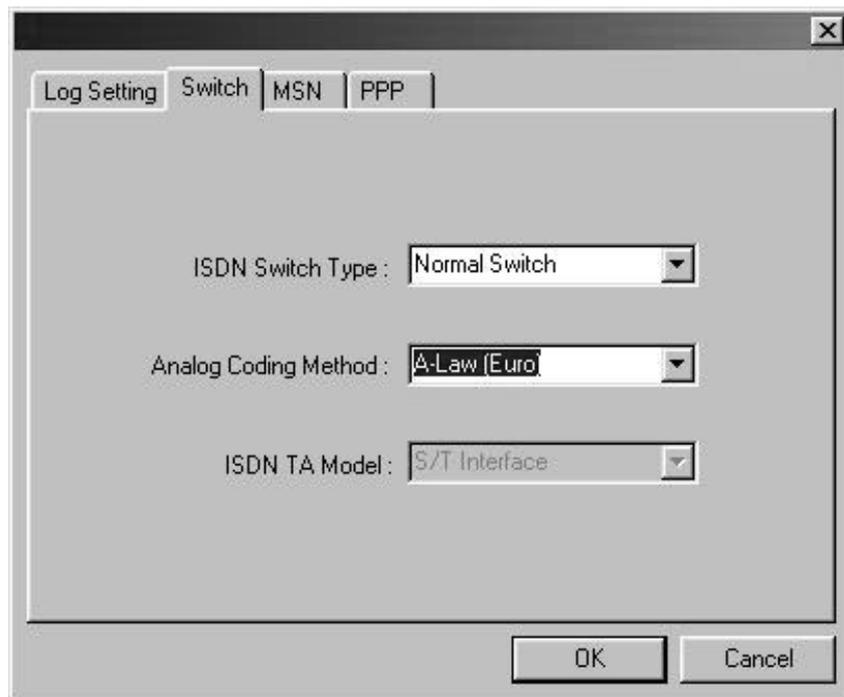
3. Virtual Com Port/Modem

The Virtual Com Port/Modem is available for Windows 98/Me/2000.

4. Information Kiosk

You can open the Kiosk for observing the online traffic information on-line information of ISDN, setting of PPP, MSN, Switch type, and log. There is “Help” icon for you to read detailed explanation of every term on the Kiosk screens.

4-1. Setting for switch



Switch type

The USB ISDN TA supports “normal Switch”, “DDI point to point switch” and “DDI point to multipoint switch”. You can use the default setting, “normal Switch” as your switch type. If your local switch provider has already informed you that your switch type is DDI (Direct Dial In), you shall select the DDI switch type for using USB ISDN TA.

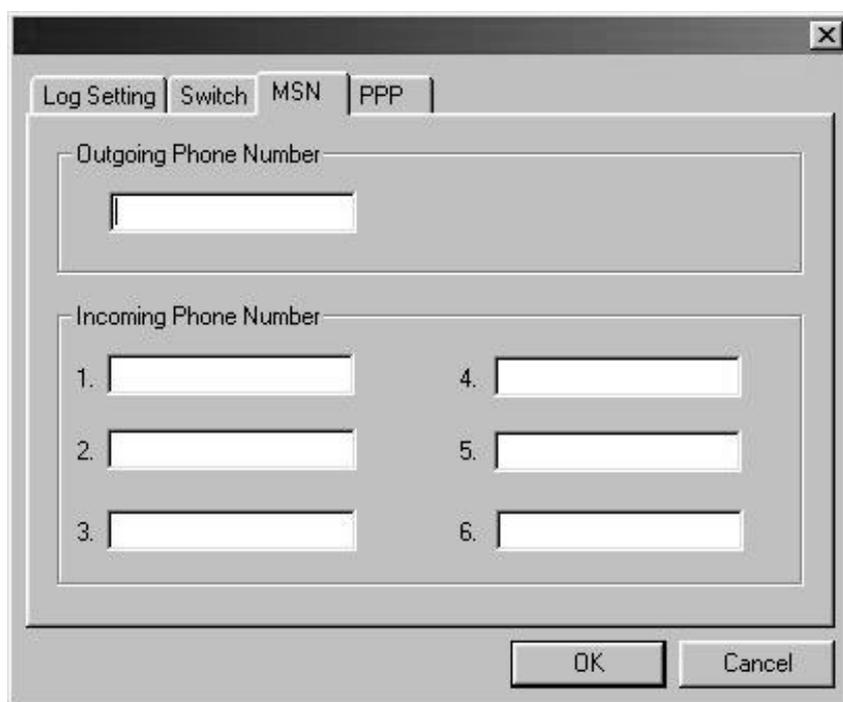
Analog Coding

This is for analog coding method. It is A-law in Europe,

Setting MSN on Information Kiosk

u-law for USA and Taiwan. For other area, please make sure what analog coding method is being adopted by your local Telecom. Otherwise, there will have problems for Fax, V.23 and V.22 connection.

4-2. Setting for MSN (Multiple Subscriber Number)



The screenshot shows a dialog box titled "MSN" with four tabs: "Log Setting", "Switch", "MSN", and "PPP". The "MSN" tab is active. Inside the dialog, there is a section for "Outgoing Phone Number" with a single text input field. Below that is a section for "Incoming Phone Number" with six numbered input fields (1 through 6) arranged in two columns. At the bottom of the dialog are "OK" and "Cancel" buttons.

Outgoing phone number

If you set the outgoing phone number, they will be sent to network when you place a call. There is no such setting as default.

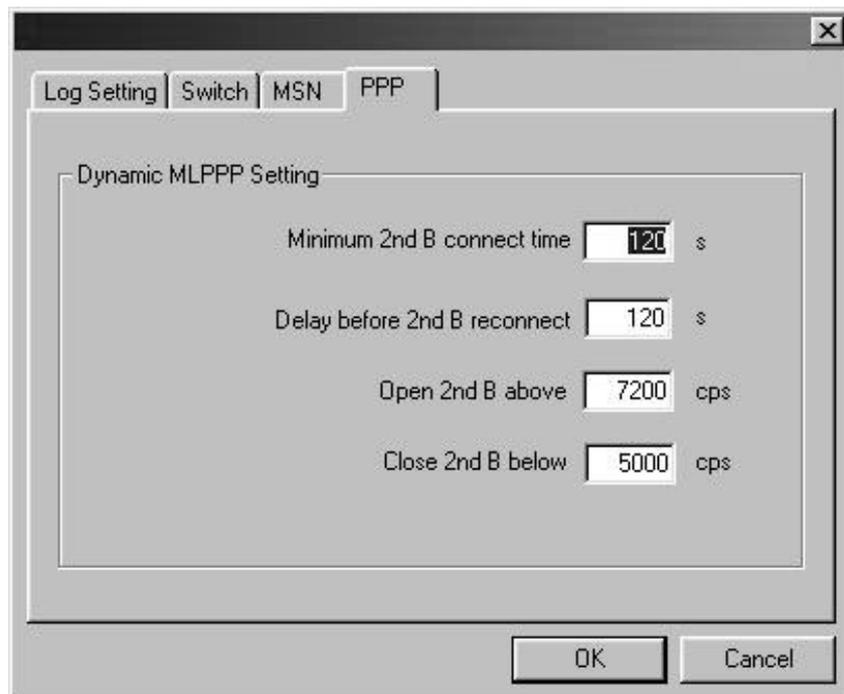
Incoming phone number

The Multiple Subscriber Number (or MSN) is an ISDN feature that allows you to have more than one directory numbers for a single BRI. Thus if you have more than one ISDN devices connected to the NT1, you can set a specific MSN to the USB ISDN TA so that it can accept an incoming call that is called to the MSN.

PPP on Information Kiosk/PnP Indicator

For example, if you set an MSN as “123” the USB ISDN TA will only accept the call with “Called Party Number’s xx..x123. Where XXX denotes any leading digits of the MSN “123” (Only the last digits of the numbers are compared!) You can set up to 3 MSN’s for each port to the USB ISDN TA. By default, no MSN is assigned. In other words, the miniVigor128 will accept all incoming calls with every port.

4-3. Setting for PPP



Dynamic MLPPP

The setting is only working if you select “D-Link ISDN DynamicMLPPP” as modem type.

5. PnP Indicator

(1)It can automatically display connection speed.

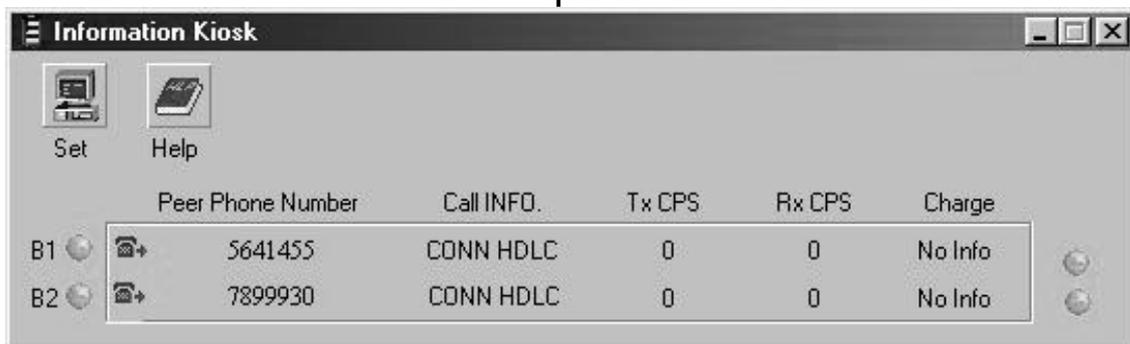
 two green lights =>128Kbps

 one green light and one red light => 64Kbps

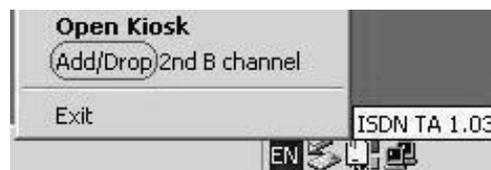
(2)Move mouse over the PnP indicator to show the current driver version.



(3)Double-click the PnP Indicator to open the Kiosk



(4)Add/Drop the 2nd B channel via right- click on the PnP Indicator.



6. Uninstallation



You can easily uninstall the drivers by clicking “Uninstall DU-128TA+” if necessary.

For Mac Users

1. Internet via ISDN at the speed of 64Kbps/128Kbps

1-1. Call Bumping

The USB ISDN TA supports the call bumping function. Users do not need to set anything to enable this function which will run automatically. If there is an incoming analog call and the line connection is at 128Kbps, the USB ISDN TA will drop to 64Kbps (one B channel) to accept this analog call. Also if you want to make a remote analog call and the line connection is at 128Kbps, the USB ISDN TA will drop to 64Kbps (one B channel) to make this call out.

Once 128Kbps is dropped to 64Kbps (i.e. one B channel is dropped), you may click on “2nd B On” for raising again the connection back to 128Kbps by yourself.

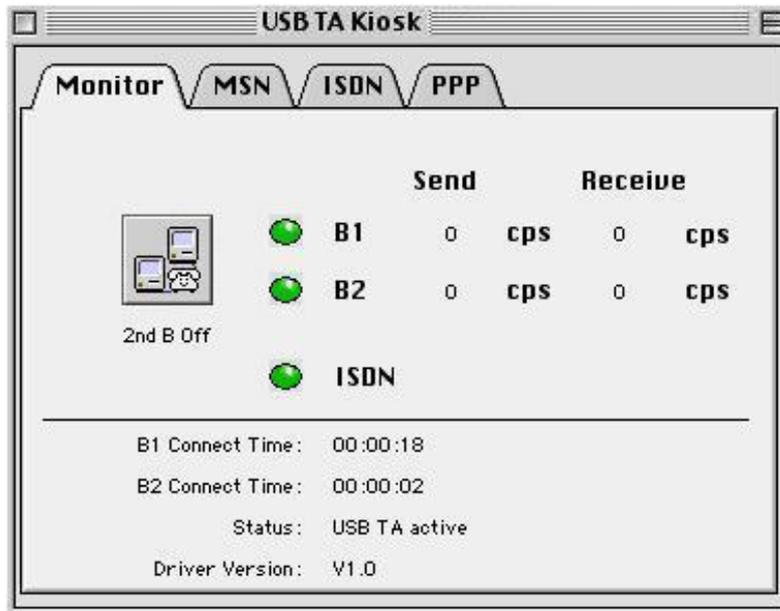
1-2.Connection at 128Kbps (Two B channels)

Modem Type	Function	Method
Mini USB TA PPP	Connect with 64Kbps only.	Done by Apple
Mini USB TA	Connect with 64Kbps first	You may use “ 2nd B On” to change the speed whenever you want.
Mini USB TA MLPPP	Connect with 128Kbps first	You may use “ 2nd B off” to change the speed whenever you want.
Mini USB TA Dynamic MLPPP	Connect with 64Kbps first.	It will be automatically adjusted via the traffic setting at “PPP” section of Kiosk setting.

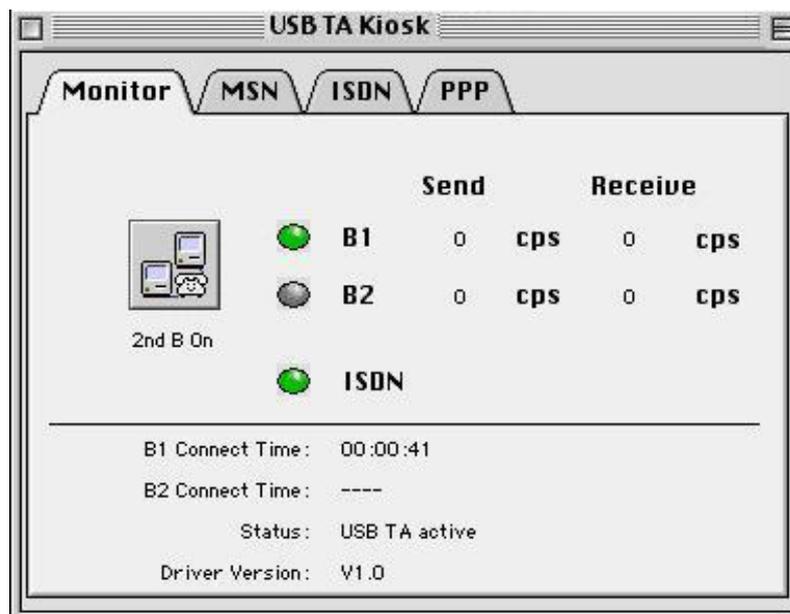
Multiple-port feature

How can you use “2nd B Off” or “2nd B On” on the Kiosk?

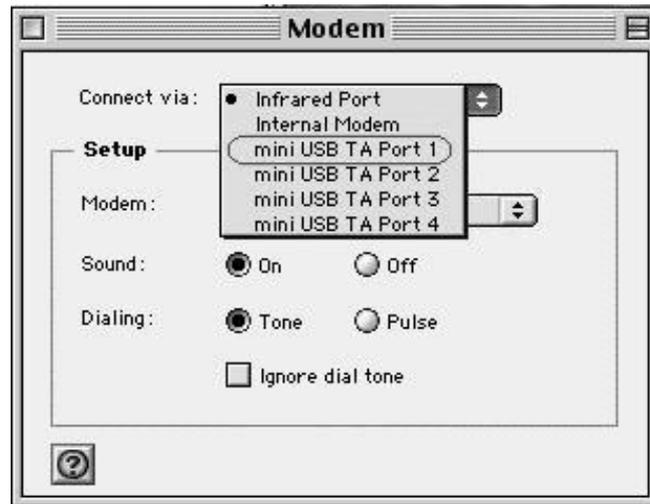
(1) Please click the “2nd B Off” to change to “2nd B On” for from 128Kbps to 64Kbps.



(2) Please click the “2nd B On” to change to “2nd B Off” for from 64Kbps to 128Kbps.



2. Innovative Multiple-port feature for applications



The multiple-port function of the USB ISDN TA is developed for the users to utilize up to four (4) communications applications by increasing efficiency.

For example, this benefit enables you may still use the FaxStf software to receive/send fax while you are using “Remote Access” mode.

3. Setting for Information Kiosk

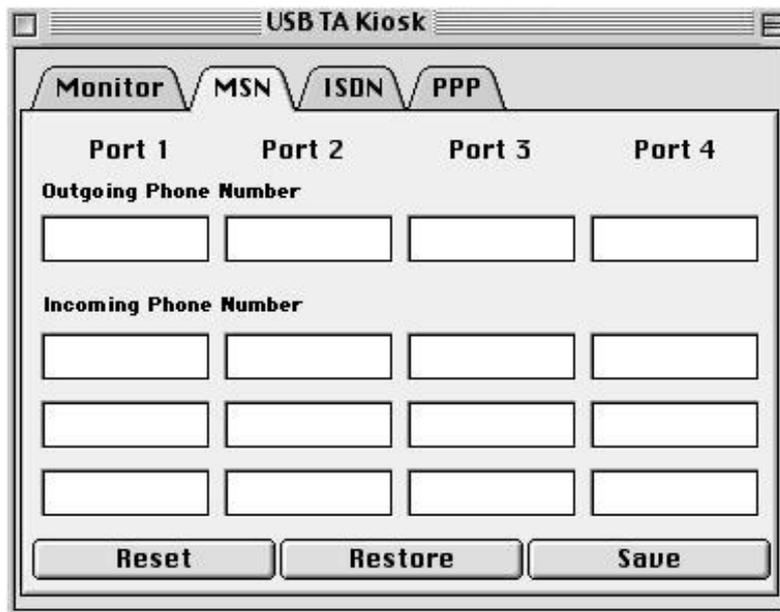
3-1. Setting for Monitor

you may know the connection speed, duration, current driver version as well as the behavior of ISDN connection.

Lamps	Functions
ISDN	Lights up when the ISDN line is activated.
B1/B2	Lights up when the B1/B2 channel is being raised up.
2nd B Off 2nd B On	Provides 64K/128K PPP connection for Internet.

If you select “mini USB TA PPP” and “mini USB TA MLPPP”, you can add/drop 2nd B channel for 128K or 64K connection whenever you want. If you select “mini USB TA PPP”, the connection will be 64K at first. As you select “mini USB TA MLPPP”, the connection is 128K at first.

3-2. Setting for MSN (Multiple Subscriber Number)



The screenshot shows a window titled "USB TA Kiosk" with four tabs: "Monitor", "MSN", "ISDN", and "PPP". The "MSN" tab is selected. Below the tabs, there are four columns labeled "Port 1", "Port 2", "Port 3", and "Port 4". Under each port, there are two rows of input fields: "Outgoing Phone Number" and "Incoming Phone Number". At the bottom of the window, there are three buttons: "Reset", "Restore", and "Save".

Outgoing Phone Number

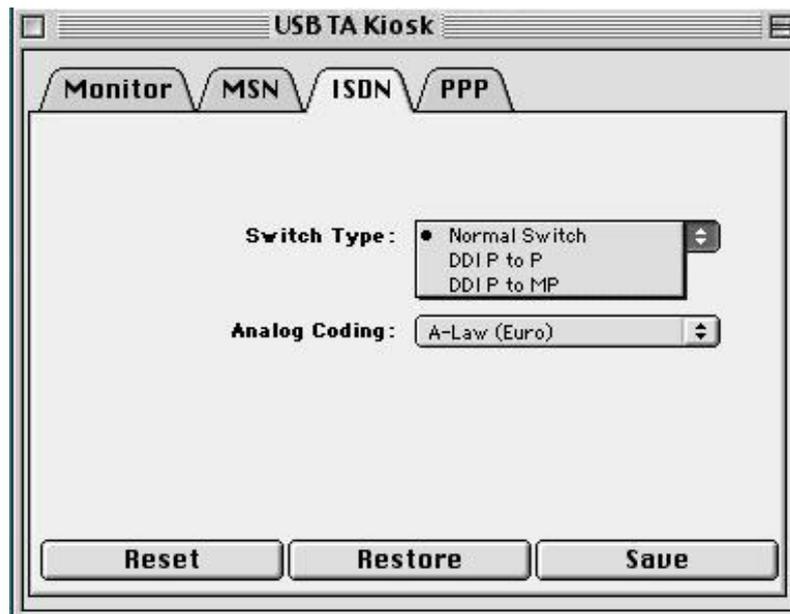
If you set the outgoing phone number, they will be sent to network when you place a call. There is no such setting as default.

Incoming Phone Number

The Multiple Subscriber Number (or MSN) is an ISDN feature that allows you to have more than one directory numbers for a single BRI. Thus if you have more than one ISDN devices connected to the NT1, you can set a specific MSN to the USB ISDN TA so that it can accept an incoming call that is called to the MSN.

For example, if you set an MSN as “123”, the miniVigor128 will only accept the call with “Called Party Number” as xx..x123. Where XXX denotes any leading digits of the MSN “123”. (Only the last digits of the numbers are compared!) You can set up to 3 MSN’s for each port to the USB ISDN TA. By default, no MSN is assigned. In other words, the USB ISDN TA will accept all incoming calls with every port.

3-3. Setting for ISDN



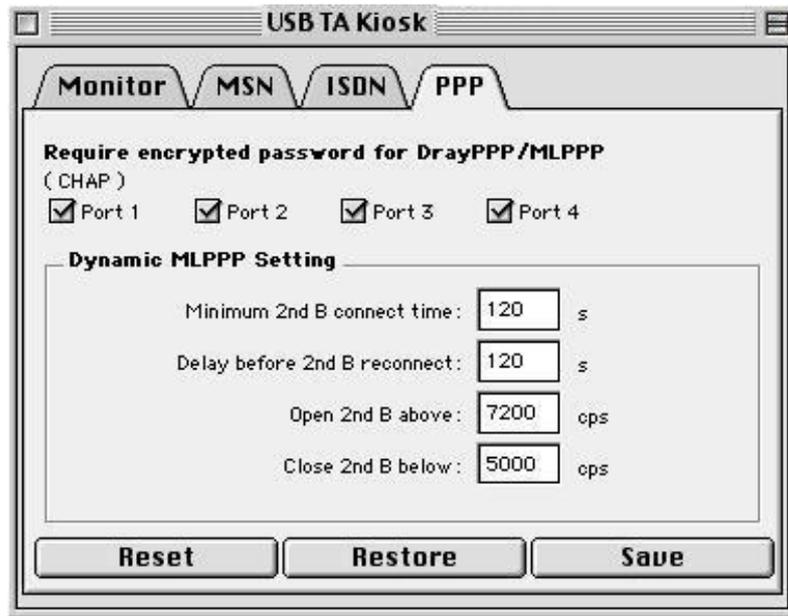
Switch Type

The USB ISDN TA supports “Normal Switch”, “DDI point to point switch” and “DDI point to multipoint switch”. You can use the default setting, “Normal Switch”, as your switch type. If your local switch provider has already informed you that your switch type is DDI (Direct Dial In), you shall select the DDI switch type for using the USB ISDN TA.

Analog Coding

This is for analog coding method. It is A-law in Europe, u-law for USA and Taiwan. For other area, please make sure what analog coding method is being adopted by your local Telecom. Otherwise, there will have problems for Fax, V.23 and V.22 connection.

3-4. Setting for PPP



Require encrypted password for PPP/ MLPPP(CHAP)

If this item is checked, it will enable “CHAP” function for PPP, MLPPP and Dynamic MLPPP protocol. Default is enabled for most of ISP PPP servers. It means if you need password encryption or not when you use PPP/MLPPP/Dynamic MLPPP.

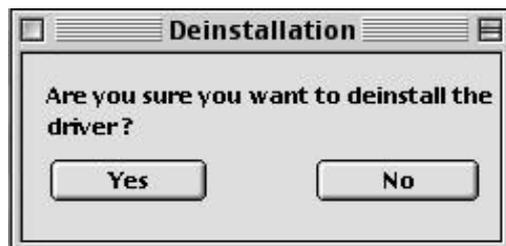
For “mini USB TA PPP”, users can disable/enable “CHAP” function in “option” of remote access.

For “mini USB TA PPP/MLPPP/ Dynamic MLPPP”, the user need to enter the setting.

Dynamic MLPPP

The setting is only working if you select “mini USB TA Dynamic MLPPP” as modem type.

4. Uninstallation



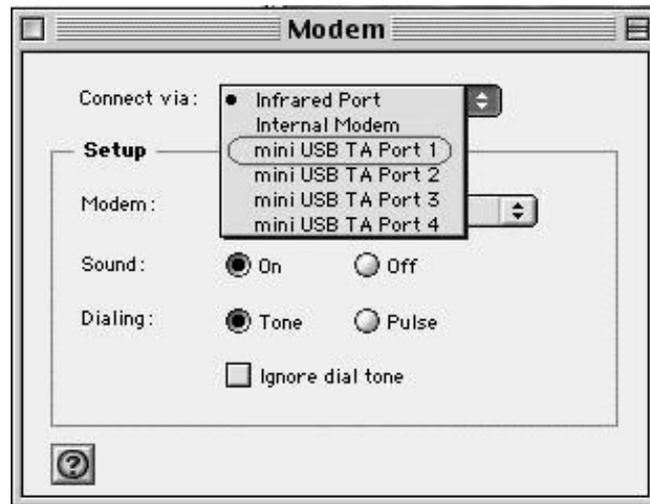
You can easily uninstall the drivers by clicking "Deinstallation" if necessary.

Setting for Applications

For Mac 8.x/9.x Users

Apple Remote Access

(1) Modem Settings (Control Panels -> modem)

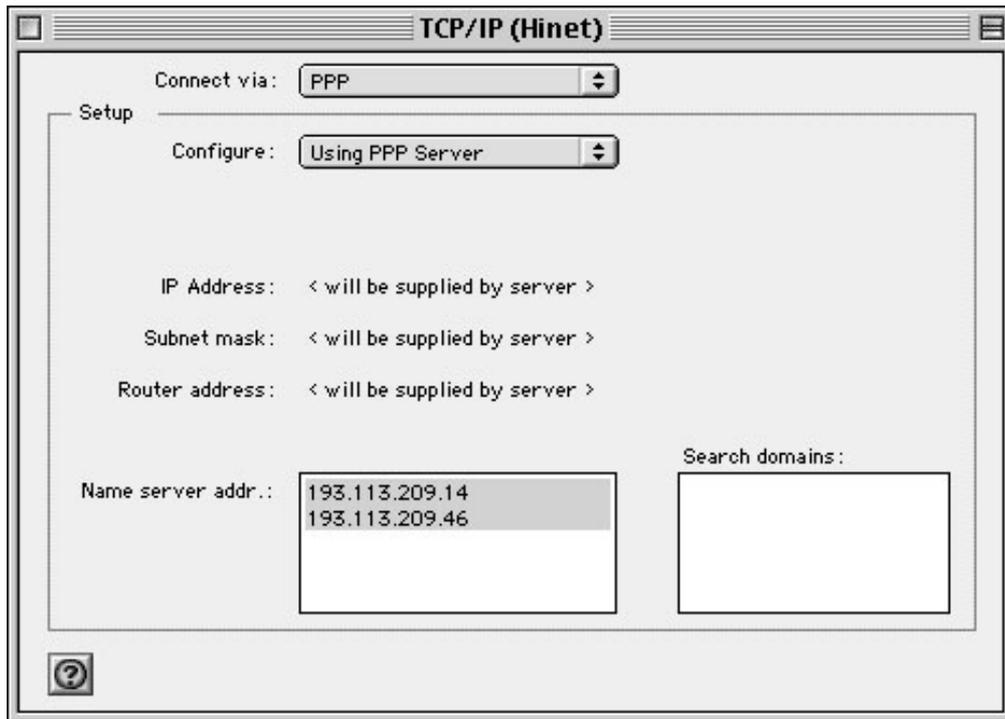


a. Select Window of "Connect via" :

mini USB TA Port 1 (or 2,3,4)

b. Select Window of "Modem" : miniUSB TA PPP (or PPP, MLPPP)

(2) TCP/IP Settings (Control Panels- >TCP/IP)

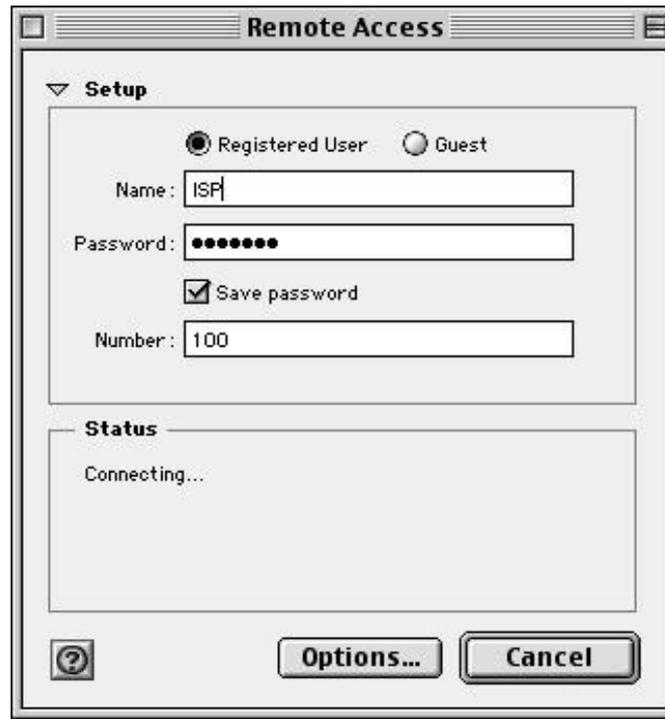


a. Select Window of "Connect via": PPP

b. Select Window of "Configure": Using PPP Server

c. In the field of "Name server addr.": Enter local Name Server IP such as 193.113.209.4

(3) Remote Access Settings

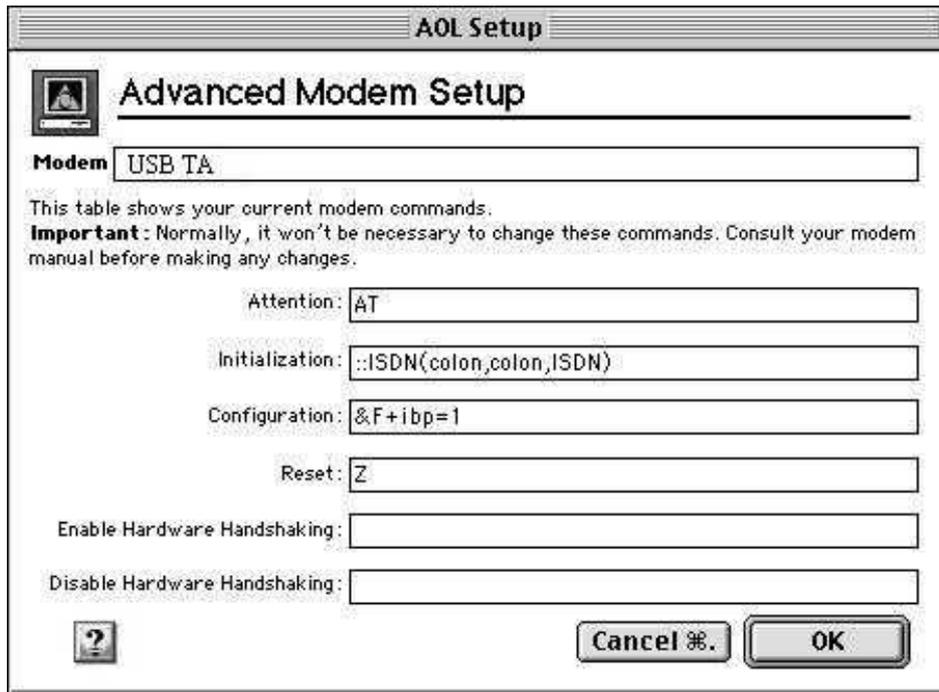


- a. Fill fields of "Name", "Password" and "Number" for ISP respectively
- b. Press "Connect"

AOL

- (1) Start your AOL by double-click and select "automatic setup"
- (2) Choose the modem "custom modem" from the list (last entry)
- (3) The new window "custom modem" opens automatically

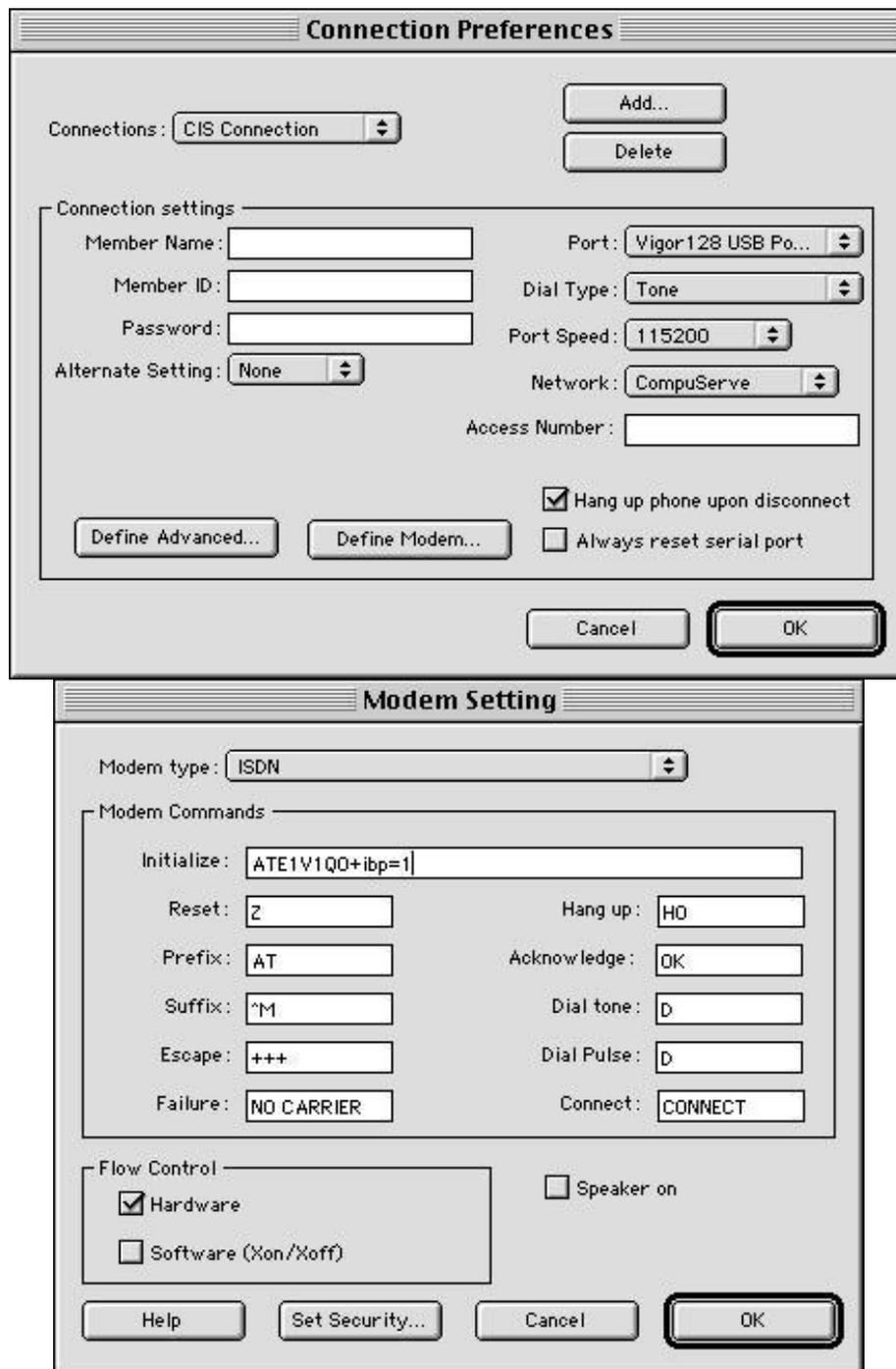
(4) Enter the following details and click at “Next”



(5) Choose the port where the USB ISDN TA is connected to: mini USB TA Port n

Protocol	Initial string
For X.75 connection	AT&F+ibp=1
For V.120 connection	AT&F+ibp=3

For different version of AOL, there are different setting way. Please contact your local AOL people for details.



Please check which protocol is used by your CompuServe.

Protocol	Initial string
For X.75 connection	<ul style="list-style-type: none"> • AT&F+ibp=1 • ATV1 E1 Q0 + i b p =1
For V.120 connection	<ul style="list-style-type: none"> • AT&F+ibp=3 • ATV1 E1 Q0 + i b p =3

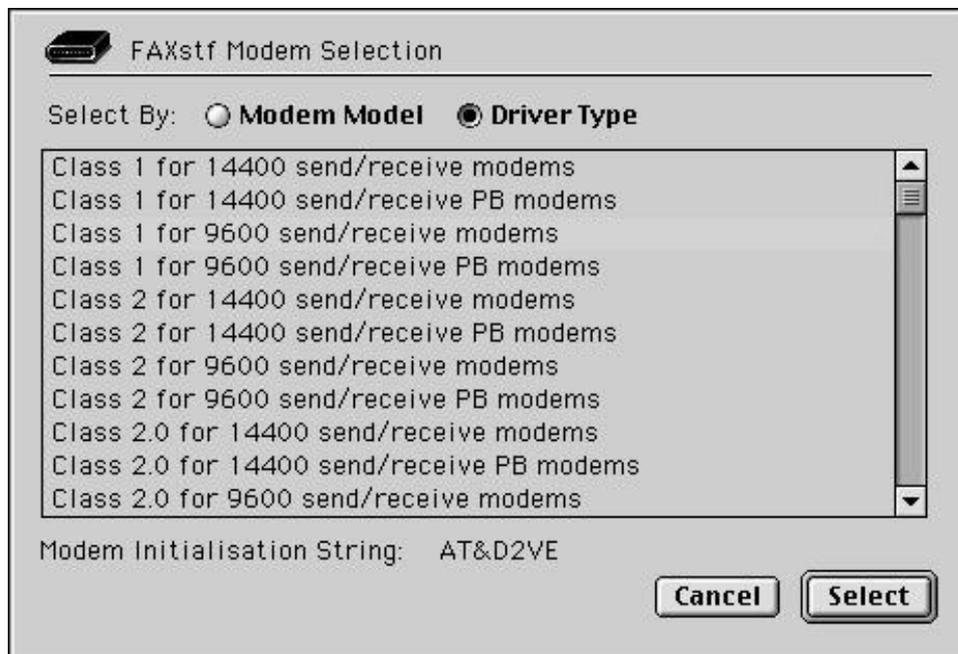
For different version of CompuServe, there are different setting way. Please contact your local CompuServe people for details.

Configuration of FaxStf

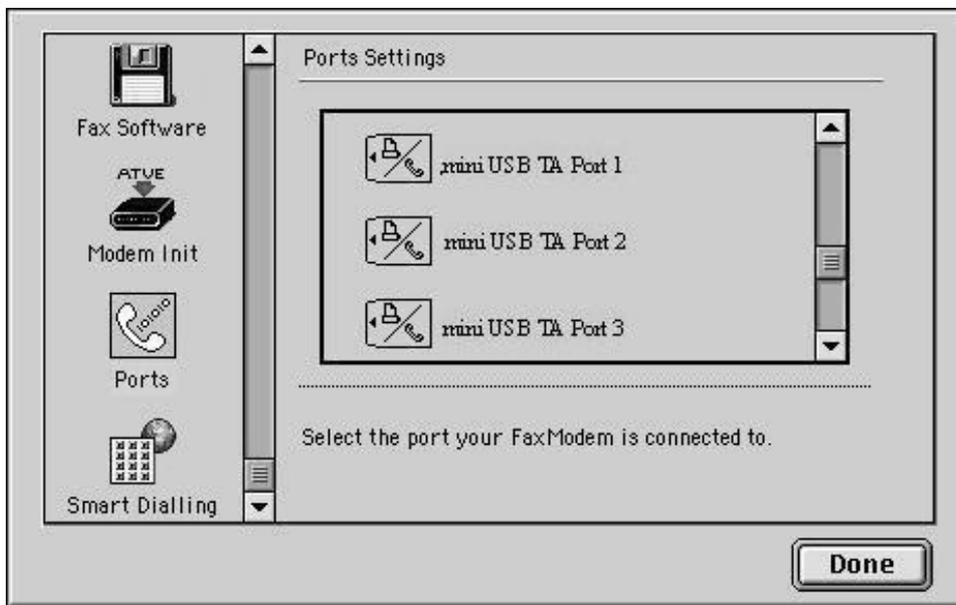
Follow the steps as below to set up FaxStf for using the USB ISDN TA to send/receive fax:

(1) Double click “Fax Browser” icon.

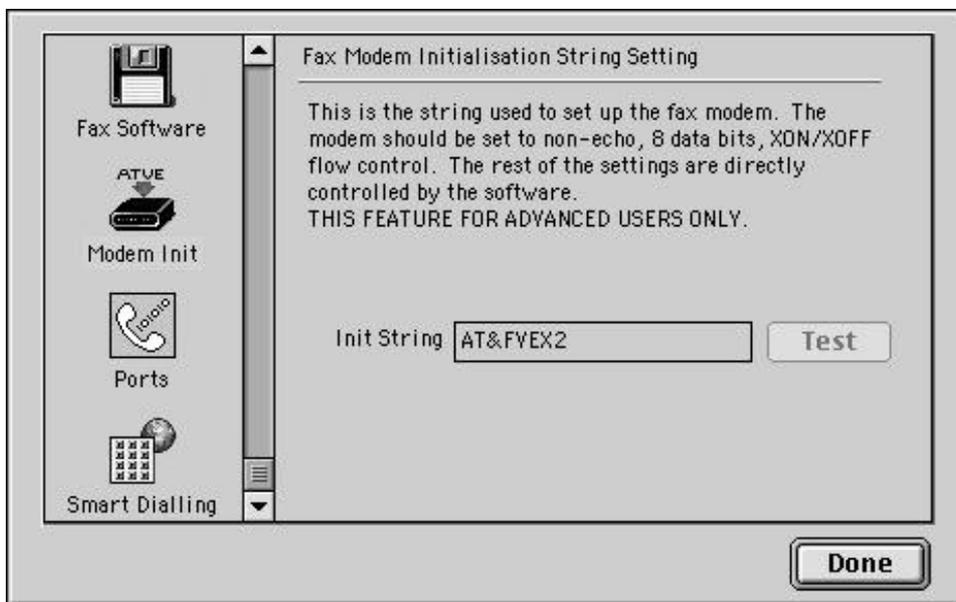
(2) Click “Edit” -> “Settings...” -> “Fax Modem” -> “Modem...” -> “Driver Type” -> “Class 1 for 9600 send/ receive Modems” -> “Select”.



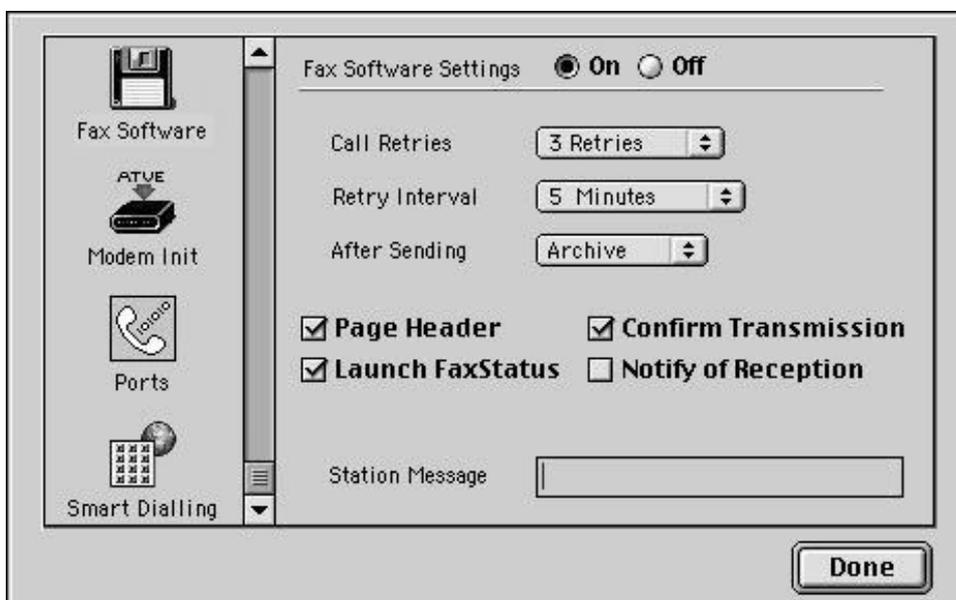
(3) Click “Ports”->“mini USB TA Port n”.



(4)Click “Modem Init”, type in initial string “AT&FVEX2”.



(5)Click “Fax Software”->“Activate”->“Done”.



For Mac OS X Users

Configuration of Your Internet Connection

(1) Open “Internet Connect”

(2) Select port & modem type after you open “Internet Connect”

a. Press the “Edit”

b. Select “Configure” as “USB modem-port”

Select “Modem” as “ISDN_PPP” or “ISDN_MLPPP” [please refer to HTML-format manual for more details about the function of modem type.]

c. Enter “Phone Number”, “Name”, “Password” in “PPP” folder

d. Select “USB modem-port” at “Configuration”

e. Press “Connect” for Internet connection!!

Technical specifications

- External ISDN adapter with USB port
- ISDN port : 1 x RJ45 connector for S/T interface
- USB port : 1 x USB cable for computer
- ISDN protocol: Euro ISDN DSS1
- Network Interface: Basic Rate Access (2B+D), S/T interface
- w Dimensions(cm): L 7.9 x W 4.7 x H 2.2
- Power consumption: maximum 0.25Watt via USB port

Lamps of USB ISDN TA

Indicator	Lighted	Blinking
ISDN Lamp	ISDN is active	1 times per second: 64Kbps is using 2 times per second: 128 Kbps is using
USB Lamp	USB is active	The traffic is on the bus

FCC Certifications

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Warning

注意

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づく第一種情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

LIMITED WARRANTY

D-Link provides this limited warranty for its product only to the person or entity who originally purchased the product from D-Link or its authorized reseller or distributor.

Limited Hardware Warranty: D-Link warrants that the hardware portion of the D-Link products described below (“Hardware”) will be free from material defects in workmanship and materials from the date of original retail purchase of the Hardware, for the period set forth below applicable to the product type (“Warranty Period”) if the Hardware is used and serviced in accordance with applicable documentation; provided that a completed Registration Card is returned to an Authorized D-Link Service Office within ninety (90) days after the date of original retail purchase of the Hardware. If a completed Registration Card is not received by an authorized D-Link Service Office within such ninety (90) period, then the Warranty Period shall be ninety (90) days from the date of purchase.

<i>Product Type</i>	<i>Warranty Period</i>
Product (excluding power supplies and fans)	One (1) Year
Power Supplies and Fans	One (1) Year
Spare parts and spare kits	Ninety (90) days

D-Link’s sole obligation shall be to repair or replace the defective Hardware at no charge to the original owner. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or of an identical make, model or part; D-Link may in its discretion may replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. The Warranty Period shall extend for an additional ninety (90) days after any repaired or replaced Hardware is delivered. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

Limited Software Warranty: D-Link warrants that the software portion of the product (“Software”) will substantially conform to D-Link’s then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original delivery of the Software for a period of ninety (90) days (“Warranty Period”), if the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link’s sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link’s functional specifications for the Software. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. The Warranty Period shall extend for an additional ninety (90) days after any replacement Software is delivered. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

What You Must Do For Warranty Service:

Registration Card. The Registration Card provided at the back of this manual must be completed and returned to an Authorized D-Link Service Office for each D-Link product within ninety (90) days after the product is purchased and/or licensed. The addresses/telephone/fax list of the nearest Authorized D-Link Service Office is provided in the back of this manual. **FAILURE TO PROPERLY COMPLETE AND TIMELY RETURN THE REGISTRATION CARD MAY AFFECT THE WARRANTY FOR THIS PRODUCT.**

Submitting A Claim. Any claim under this limited warranty must be submitted in writing before the end of the Warranty Period to an Authorized D-Link Service Office. The claim must include a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same. The original product owner must obtain a Return Material Authorization (RMA) number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided. After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. The packaged product shall be insured and shipped to D-Link, 53 Discovery Drive, Irvine CA 92618, with all shipping costs prepaid. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

What Is Not Covered:

This limited warranty provided by D-Link does not cover:

Products that have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way

that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed;

Initial installation, installation and removal of the product for repair, and shipping costs;

Operational adjustments covered in the operating manual for the product, and normal maintenance;

Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; and

Any hardware, software, firmware or other products or services provided by anyone other than D-Link.

Disclaimer of Other Warranties: EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

Limitation of Liability: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT.

GOVERNING LAW: This Limited Warranty shall be governed by the laws of the state of California.

Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

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Registration Card

Print, type or use block letters.

Your name: Mr./Ms _____

Organization: _____ Dept. _____

Your title at organization: _____

Telephone: _____ Fax: _____

Organization's full address: _____

Country: _____

Date of purchase (Month/Day/Year): _____

Product Model	Product Serial No.	* Product installed in type of computer (e.g., Compaq 486)	* Product installed in computer serial No.

(* Applies to adapters only)

Product was purchased from:

Reseller's name: _____

Telephone: _____ Fax: _____

Reseller's full address: _____

Answers to the following questions help us to support your product:

1. Where and how will the product primarily be used?

Home Office Travel Company Business Home Business Personal Use

2. How many employees work at installation site?

1 employee 2-9 10-49 50-99 100-499 500-999 1000 or more

3. What network protocol(s) does your organization use?

XNS/IPX TCP/IP DECnet Others _____

4. What network operating system(s) does your organization use?

D-Link LANsmart Novell NetWare NetWare Lite SCO Unix/Xenix PC NFS 3Com 3+Open

Banyan Vines DECnet Pathwork Windows NT Windows NTAS Windows '95

Others _____

5. What network management program does your organization use?

D-View HP OpenView/Windows HP OpenView/Unix SunNet Manager Novell NMS

NetView 6000 Others _____

6. What network medium/media does your organization use ?

Fiber-optics Thick coax Ethernet Thin coax Ethernet 10BASE-T UTP/STP

100BASE-TX 100BASE-T4 100VGAnyLAN Others _____

7. What applications are used on your network?

Desktop publishing Spreadsheet Word processing CAD/CAM

Database management Accounting Others _____

8. What category best describes your company?

Aerospace Engineering Education Finance Hospital Legal Insurance/Real Estate Manufacturing

Retail/Chainstore/Wholesale Government Transportation/Utilities/Communication VAR

System house/company Other _____

9. Would you recommend your D-Link product to a friend?

Yes No Don't know yet

10. Your comments regarding this product?

PLEASE
PLACE STAMP
HERE

TO:

D-Link®